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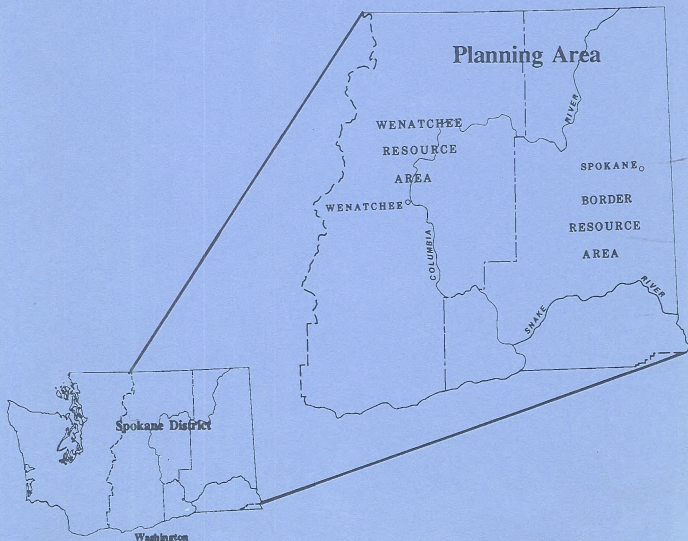
U.S. Department of the Interior
Bureau of Land Management

Spokane District Office

May 1987

Spokane Resource Management Plan Record of Decision

Rangeland Program Summary (RPS)



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**U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management**

Spokane Resource Management Plan

Record of Decision

Rangeland Program Summary (RPS)

**Prepared By
Department of the Interior
Bureau of Land Management**

Record of Decision

Spokane Resource Management Plan

Spokane District, Spokane, Washington

This resource management plan documents the decisions reached by the Bureau of Land Management (BLM) for managing 307,523 acres of public land in the Spokane District. The decision is to adopt Alternative B the Preferred Alternative of the Final Resource Management Plan/Environmental Impact Statement. The major decisions in this plan are:

Continue to authorize grazing permits at the 1983 total preference level, 30,073 Animal Unit Months (AUMs). Management systems will be developed, maintained, or revised for 16 Improve category allotments. Competitive forage will initially be available for wildlife at current levels. All future livestock use adjustments will focus on achieving 50 percent utilization of key forage species.

Range improvements will be made in the Maintain and Custodial 1 allotments if the intermingled landowners cooperate in the preparation and implementation of Coordinated Resource Management Plans.

Manage 41,443 acres of commercial forestland for a sustainable harvest level of approximately 39 million board feet per decade. Minor forest products will be sold where consistent with protection of other resource values.

Conduct land tenure adjustments to consolidate or otherwise promote the efficient management of the public land resources, protect and improve valuable wildlife habitat, enhance recreational opportunities, and provide access to public lands.

Leave all locatable minerals on public lands in the planning area open to entry under the provisions of the Mining Law of 1872, as amended, except for 80 acres currently under protective withdrawal. All lands, currently available for mineral leasing, will remain available except for the 7,140-acre Juniper Dunes Wilderness Area. Leases in this area will not be reissued once terminated.

Motorized vehicle designations are as follows: 230,500 acres are designated as open to motorized vehicle use; 8,980 acres are designated as seasonally restricted to designated roads and trails; 54,705 acres are designated as permanently restricted to designated roads and trails; and 13,418 acres are designated as permanently closed to motorized vehicle use. (See Maps 4 and 5)

Nine of the Ten areas, proposed for designation as Areas of Critical Environmental Concern in the Final RMP, are designated. These areas are Hot Lakes Research Natural Area (RNA), Brewster Roost, Colockum Creek, Rock Island Canyon, Yakima River Cliff and Umtanum Ridge, McCoy Canyon, Earthquake Point, Roosevelt Slope, and Sentinel Slope. In addition to the proposed ACECs, this ROD reaffirms the designations of the three existing ACECs, the Juniper Forest, Webber Canyon and the Yakima and Columbia River Islands ACECs. In all, a total of 8,540 acres of public land are covered by these designations.

Modify grazing systems and/or construct improvements to protect or improve riparian habitat.

Alternatives Considered and Rationale for Decision

Four alternatives for managing the public lands in Spokane District planning area were analyzed in the Resource Management Plan/Environmental Impact Statement.

The proposed Resource Management Plan (the Preferred Alternative in the Resource Management Plan/Environmental Impact Statement) emphasizes management, production on a sustained yield basis, and use of renewable resources on the majority of public lands in the Spokane District planning area while providing protection, maintenance, or enhancement of cultural, soil, water, botanical, and recreational resource values and big, small, and nongame habitats. Trade-offs will safeguard nonconsumptive uses while accommodating consumptive uses. The proposed Resource Management Plan best meets national guidance, best satisfies the planning criteria, and best resolves issues while contributing to the local economy.

The Production Alternative emphasized the highest degree of commodity production allowable, considering legal constraints. Trade-offs emphasized consumptive uses over nonconsumptive uses.

The Protection Alternative emphasized protection and enhancement of natural values while allowing use and production only at levels that do not risk diminishing such values. Trade-offs favored protection of the resource over consumptive uses.

The No Action Alternative provided for the continuation of existing management. This alternative maintained the present management direction while responding to requirements of new regulations and changing policies. Trade-offs emphasized commodity production while safeguarding critical resource values. (See Table S-1 for a summary of long-term environmental consequences.)

Mitigation Measures

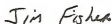
All protective measures and program design features, identified in the plan, will be taken to mitigate adverse impacts. These measures will be strictly enforced during implementation. Monitoring and evaluation will indicate the effectiveness of these measures in minimizing environmental impacts. Therefore, additional measures to protect the environment may be taken during or following monitoring.

District Recommendation

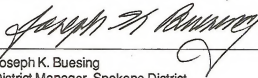
I recommend adopting the Preferred Alternative of the Spokane Resource Management Plan/Environmental Impact Statement of August 2, 1985, as written.



Lee V. Larson
Border Resource Area Manager



James F. Fisher
Wenatchee Resource Area Manager



Joseph K. Buesing
District Manager, Spokane District

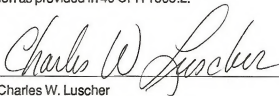
5/19/87

Date

State Director Approval

I approve the Spokane Resource Management Plan decisions as recommended. Individual grazing decisions to implement the range land program portions of the RMP will be issued to the affected lessees for those allotments where changes are proposed and agreement has not been reached. Those decisions will explain and provide for the protest and/or appeal procedures under 43 CFR 4160 and 43 CFR 4.470.

This document meets the requirement for a Record of Decision as provided in 40 CFR 1505.2.



Charles W. Luscher
State Director Oregon/Washington

Table S-1 Summary of Long-Term Environmental Consequences and Comparison of Alternative Allocations

	Unit of Measure	Existing Situation	Alternative A Production	Alternative B Proposed RMP	Alternative C Protection	Alternative D No Action
Soil (Erosion)	-	-	+L	-M	-M	+L
Water						
Quantity	-	-	NC	NC	NC	NC
Quality	-	-	-L	+L	+L	-L
Vegetation						
Ecological Condition	Acres					
Climax	Acres	7,493	7,493	7,493	7,493	7,493
Late Seral	Acres	35,376	38,506	46,589	46,513	36,042
Mid Seral	Acres	40,725	40,497	29,962	29,970	39,733
Early Seral	Acres	59,556	56,654	58,227	59,171	59,883
Unclassified	Acres	106,324	106,324	106,324	106,324	106,324
Threatened, Endangered, or Sensitive Species	-	NC	NC	NC	NC	NC
Wildlife Habitat Condition						
Upland Habitat	-	-	-L	+M	+M	+L
Riparian Habitat	-	-	-L	+L	+L	+L
Fish Habitat	-	-	NC	NC	NC	NC
Livestock Grazing						
Available Forage	AUMs	30,073	31,521	30,107	27,715	31,135
Recreation						
Visitor Use Levels	-	-	-L	NC	NC	NC
Off-Road Vehicle						
Open	Acres	256,917	256,913	230,500	0	256,917
Limitations	Acres	37,268	37,312	63,685	294,185	37,268
Closed	Acres	13,418	13,378	13,418	13,418	13,418
Cultural Resources						
Protection of Values			NC	NC	NC	NC
Visual Resources						
Protection/Enhancement of Visual Quality	-	-	-L	+L	+L	NC
Special Management Areas		5	5	14	14	5
Forest Products (1)						
No Planned Harvest (2)						
Noncommercial Forest (woodlands)	Acres	2,484	2,484	2,484	2,484	2,484
Nonoperable	Acres	3,714	3,714	3,714	3,714	3,714
Multiple Use Set Aside (4)						
Riparian	554	277	416	924	554	
Wildlife Habitat	Acres	1,457	1,079	1,619	5,400	1,457
ACEC	Acres	161	161	161	161	161
Subtotal	8,370	7,715	8,394	12,683	8,370	
Low Intensity Timber Production (equivalent acres) (5)	1,680	966	1,920	4,800	1,680	
Full Timber Production						
Base (2)	Acres	44,707	46,076	41,443	37,274	44,707
Total Forestland	Acres	54,757	54,757	54,757	54,757	54,757
Annual Sustainable Harvest						
Level		4.0	4.12	3.98	3.33	4.00
Energy & Minerals	Acres					
Leasable Minerals (closed)		0	7,140	7,140	7,140	7,140
No Surface Occupancy						
Stipulations	Acres	20,298	13,158	13,158	13,158	13,158
Standard Stipulations		287,305	287,305	287,305	287,305	287,305
Locatable Minerals	withdrawn	7,220	NC	NC	NC	NC
Economic Conditions						
Long-Term Loss or Gain in Value	(\$000)	-	+62	-33	-165	+42

+ Increase impact
 - Decrease impact
 in NC
 L Low
 M Moderate
 H High

- (1) Minor forest products (firewood, posts, poles) not included.
- (2) A breakdown of acres by management area for the proposed plan is displayed No Change Table 2-5.
- (3) These acres have been removed from the timber production base due to fragile site condition and reforestation problems.
- (4) These acres are commercial forestland which would be withdrawn from timber production to protect other resources. Also shown on Table 2-5.
- (5) Although actual acres have not been identified, it is assumed that mitigation measures to reduce site-specific adverse effects would result in productivity losses equivalent to these acres.



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Chapter 1



Introduction

This plan contains the decisions on all land use proposals presented in the August 1985 final environmental impact statement. It describes in general terms the implementation, monitoring, and amendment processes and discusses the management of each resource, the order in which projects will be managed, the order in which projects will be carried out, and what support will be needed.

This plan does not present information on environmental consequences, rationale, consistency, or effects of the management. This information was previously covered in the draft and final environmental impact statements which may be obtained by contacting the Spokane District Office.

The rangeland program summary portion of this document summarizes the livestock grazing management program and grazing decisions reached through this plan and consultation with affected parties. The rangeland program summary describes which selective management category each allotment falls into and gives a proposed schedule for issuance of grazing decisions where stocking rates are known. It also details the studies and actions to be taken to determine proposed stocking rates for those allotments where stocking rates are not known.

Purpose and Need

This plan provides a broad framework for multiple use management on public land. This plan makes land use allocations, sets broad production goals, and protects important resource values.

In addition to meeting the requirements in the Federal Land Policy and Management Act of 1976 for land use planning (43 CFR, Part 1600), this plan satisfies the Bureau of Land Management's (BLM) policy to (1) respond to the court mandate (Natural Resources Defense Council, et al. versus Watt (Civil Action 1983-75)) requiring the BLM to complete a livestock grazing environmental impact statement; and (2) identify public land as open, closed, or limited for off-road vehicle use (Executive Order 11989). It also will be used to calculate, in part, a sustained yield harvest level of forest products from BLM managed commercial forestlands in eastern Washington.

Description of the Planning Area

The planning unit is bordered by the Cascade Mountain Range to the west, the Canadian Border to the north, and the States of Oregon to the south and Idaho to the east. The BLM administers the public land in this area from the District and Area Offices in Spokane, Washington, and the Wenatchee Area Office in Wenatchee, Washington. The public land in this planning unit is scattered throughout 19 of the 20 counties east of the Cascade Mountains. Spokane County is the only county in which the Bureau of Land

Management (hereafter referred to as the BLM) does not manage any surface resource.

Much of the public lands in the Spokane District are intermingled with private lands and lands managed by state agencies, such as the Washington State Department of Natural Resources (WSDNR) and Washington State Department of Game (WSDG). Other lands are adjacent to or near Indian reservations, national forests, Bureau of Reclamation (BR) administered lands, or Department of Energy lands. This intermingling has led, in many cases, to cooperative management of the lands. The Spokane District manages 8,400 acres of adjacent Bureau of Reclamation land in Grant County. The Spokane District also has 16 cooperative agreements with the Washington State Department of Game, under which the state manages the BLM land in conjunction with their own lands. (See Appendix A.)

This ownership pattern, along with the extreme topographic and climatic differences, complicates the management of these lands. To facilitate analysis in the Resource Management Planning process, these lands have been grouped into 13 management areas that exhibit either similar resource values or public concerns. The approximate locations and acreages of these management areas are depicted on Map 1 and Table 1-1 respectively.

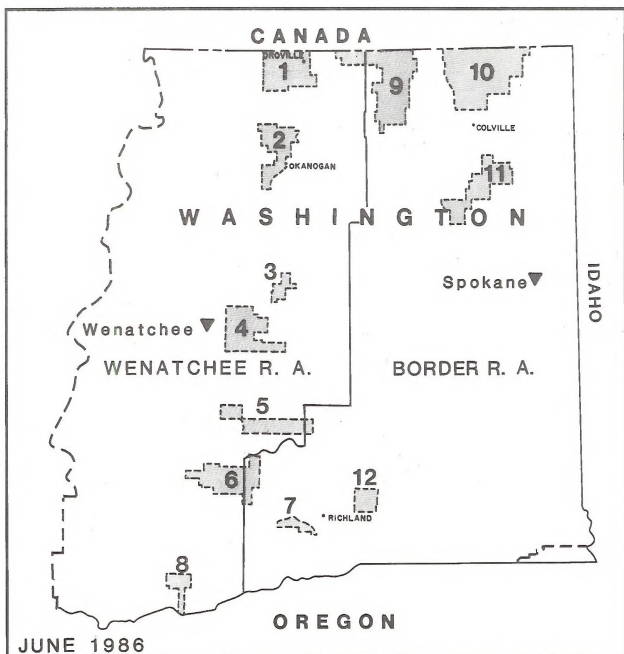
This Record of Decision does not address resource issues on 2,900 acres of BLM administered land in western Washington.

The 10,000 acres of public land in southern Asotin and Garfield Counties, which are in the Grand Ronde River Basin in Washington, are managed by the Baker Resource Area, Vale District, Baker, Oregon. Management direction and resource allocations will be developed through the Baker Resource Management Plan which is scheduled to be completed in 1987.

Implementation

Decisions in the plan will be implemented over a period of years and will be tied to the BLM budgeting process. Therefore, priorities have been established for each resource to guide the order of implementation. The priorities link the planned actions in the resource management plan with the budget process. Priorities for each program will be reviewed annually to help develop the annual work plan commitments for the coming year. The priorities may be revised based upon new administrative policy, new Departmental directions, or new Bureau goals. The priorities of implementation are presented by resource in Chapter 2.

Activity plans and environmental assessments may be required prior to conducting specific activities such as timber harvests. For example, forest management plans will show specific project locations; specific project proposals and the associated environmental assessments would describe and analyze the impacts



MAP 1

Legend

- | | |
|----------------------|---------------------------|
| 1. Similkameen | 7. Badger Slope |
| 2. Conconully | 8. Rock Creek |
| 3. Jameson Lake | 9. North Ferry |
| 4. Douglas Creek | 10. North Stevens |
| 5. Saddle Mountains | 11. Huckleberry Mountains |
| 6. Rattlesnake Hills | 12. Juniper Forest |

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SPOKANE DISTRICT, WASHINGTON

MANAGEMENT AREAS

Table 1-1 Surface Landownership of Planning Area

	Acres	% of Total
Federal (BLM)	307,603	1.7
Federal (United States Forest Service)	5,462,388	29.4
Federal (Bureau of Reclamation)	523,600	2.8
Federal (Yakima Firing Center)	261,000	1.4
Federal (Hanford Works--DOE)	364,800	1.9
Indian Reservations	2,334,325	12.6
State	1,452,280	7.8
Private	7,872,912	42.4
Total	18,578,808	100.0

Management Area (MA)	Administering Resource Area	Total Acres	BLM	% of Total
Similkameen	Wenatchee	200,960	28,900	14.4
Conconully	Wenatchee	141,440	11,500	8.1
Jameson Lake	Wenatchee	35,200	3,660	10.4
Douglas Creek	Wenatchee	183,680	22,000	11.9
Saddle Mountains	Wenatchee	147,200	24,300	16.5
Rattlesnake Hills	Wenatchee	193,920	24,725	12.8
Badger Slope	Border	48,630	7,720	15.9
Rock Creek	Wenatchee	36,560	6,427	17.6
North Ferry	Border	294,400	13,000	4.4
North Stevens	Border	376,200	13,205	3.5
Huckleberry Mountains	Border	168,960	11,269	6.7
Juniper Forest	Border	51,520	17,120	33.0
Scattered Tracts	Wenatchee & Border	16,640,298	123,697	.7
Total		18,578,808	307,523	1.7

Mineral Ownership

County	Acres Public Land Administered by BLM	*Private Surface Federal Subsurface Minerals	Total Acreage of County
Adams	601	35,588	1,212,800
Asotin	10,422	20,400	401,280
Benton	14,524	43,559	1,095,680
Chelan	21,574	25,142	1,875,840
Columbia	519	11,025	550,400
Douglas	37,683	41,133	1,177,600
Ferry	11,968		1,406,080
Franklin	17,367	120,005	806,400
Garfield	433	3,444	456,960
Grant	37,129	274,591	1,721,600
Kititas	16,009	80,695	1,481,600
Klickitat	17,402	39,737	1,219,200
Lincoln	6,974	21,346	1,472,000
Okanogan	55,256	15,884	3,387,520
Pend Oreille	1,904		899,840
Stevens	29,813		1,591,040
Walla Walla	698	6,989	814,080
Whitman	1,334	12,029	1,406,968
Yakima	25,913	75,150	2,734,720
Total	307,523	706,285	18,578,808

* Includes other federal subsurface lands where BLM has oil and gas and/or other mineral leasing authority.

of specific actions associated with development, operation, and rehabilitation of the project benefits.

Monitoring

This plan will be evaluated every five years and at other times as appropriate, based upon the sensitivity of the resources to the decisions involved. This type of monitoring will be conducted to review the plan as a whole to determine the need for revision or amendment. Specific actions within the plan will also be monitored annually. Individual resources will be monitored as explained in Chapter 2. Periodic evaluation will determine whether actions are consistent with current policy, whether original assumptions were correct and impacts correctly predicted, whether mitigation measures are satisfactory, whether significant changes have been made in related plans of other federal agencies or state or local governments, or whether new data is of significance to the plan. Annual resource monitoring will also help to establish long-term use and resource condition trends and provide valuable information for future planning. Ultimately, resource monitoring and plan evaluation will determine whether there is sufficient cause to warrant maintenance, amendment, or revision of the plan. Additional resource program monitoring information is outlined in Chapter 2 under the respective program narratives.

Maintenance

This plan will be maintained as necessary to reflect minor changes in data. This maintenance will be limited to refining or documenting a previously approved decision. It shall not expand the scope of resource uses or restrictions or change the terms, conditions, and decisions of the plan. Maintenance will be documented in supporting records. Formal public involvement will not be necessary to maintain the plan.

Amendments and Revisions

This plan may be amended or revised if major changes are necessary. Monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or a proposed action that may result in change in the scope, terms, or conditions of the plan would warrant an amendment or revision. An amendment will be analyzed either in an environmental assessment or an environmental impact statement. The public and other agencies will be included in the amendment and revision processes.

Valid Existing Rights

This plan will not repeal valid existing rights on public lands. Valid existing rights are those claims or rights to public land that takes precedence over the actions in this plan. Valid existing rights may be held by other federal agencies or by private individuals or companies. Valid existing rights may pertain to mining

claims, oil and gas leases, rights-of-way, and water rights.

Administrative Actions

Various types of administrative actions will require special attention beyond the scope of this plan. Administrative actions are the day-to-day transactions required to serve the public and to provide optimal use of the resources. These actions are in conformance with the plan. They include issuance of permits for fuelwood, sawtimber, Christmas trees, and competitive and commercial recreation activities; lands actions, including issuance of grants, leases, permits, and resolution of trespass; facility maintenance; law enforcement; enforcement and monitoring of permit stipulations; cadastral surveys to determine legal landownership; and engineering support to assist in mapping, designing, and implementing projects. These and other administrative actions will be conducted at the resource area, district, or state offices. The degree to which these actions are carried out will be based upon BLM policy, available personnel, and funding levels.

Public Involvement and Consistency

This resource management plan was prepared by an interdisciplinary team of specialists from the Spokane District Office. Writing of the RMP began in March 1983; however, a complex process that began in 1981 preceded the writing phase. This process included resource inventory, public participation, interagency coordination and preparation of a management situation analysis (on file in the Spokane District Office). Consultation and coordination with agencies, organizations, and individuals occurred in a variety of ways throughout the planning process.

Spokane District Advisory Council

The Bureau's Spokane District Advisory Council participated in a review of the preliminary draft of the Preferred Alternative and scoping analysis. Their review and subsequent feedback was helpful in formulation of the Preferred Alternative.

Public Participation

In July of 1983, a notice was published in the Federal Register and local news media to announce the formal start of the RMP planning process. At that time, a planning report was sent to the public to request further definition of major issues within the planning area. It also provided an opportunity to comment on proposed criteria for the formulation of alternatives.

On April 27, 1984, a notice of document availability was published in the Federal Register and, subsequently, in the local news media for the "Spokane Resource Management Plan Proposed

Land Use Alternatives" brochure. Approximately 700 copies were mailed to federal, state, and local governments and private groups, organizations, and individuals for review and comment. This document provided an outline of proposed alternatives, listed major issues, and revised planning criteria. Three alternatives portrayed various resource programs showing an arrangement from emphasis on production of commodities to emphasis on enhancement of natural values with a middle ground alternative attempting to establish a point between the two. The fourth (No Action) alternative portrays the existing situation. On October 1, 1984, a Federal Register notice announced availability of the Draft Spokane Resource Management Plan and Environmental Impact Statement and provided the addresses for obtaining copies and for submitting written comments. Over 1,000 copies of this document were also mailed to federal, state, and local governments, private groups, organizations, and individuals for review and comment. The Draft stated that the public comment period would begin October 1 and end on December 31, 1984. No public meetings were scheduled during the comment period. However, the Spokane District personnel did meet with four different groups at their request to clarify partisan concerns with the RMP.

The notice of availability for the final EIS was published on August 14, 1985, in the Federal Register. This notice announced the commencement of the protest period which ended on September 16, 1985.

Over 1,000 copies of the final EIS were mailed to the same target groups that the Draft RMP/EIS was mailed. Two protests were received, reviewed, and denied by the Director of the BLM. The governor of Washington did not identify any inconsistencies with state or local plans, policies, or programs or recommend any changes in the proposed plan.

Consultation Concerning Threatened and Endangered Species, and Cultural Resources

Informal and formal consultation with the U.S. Fish and Wildlife Service (USF&WS) will be initiated on all proposed actions which may affect any federally listed threatened or endangered species. Consultation will be done in accordance with Section 7 of the Endangered Species Act, as amended.

An appropriate level of inventory to identify historic and prehistoric sites or features will be conducted in areas proposed for Bureau initiated or authorized surface disturbing projects (such as range improvements, timber sales, road construction, land sales, or exchanges). Sites discovered are evaluated using criteria for placement on the National Register of Historic Places (36 CFR 60.6) in consultation with

the State Historic Preservation Officer. The BLM considers the effect of any proposed undertaking on sites which meet the National Register criteria by following regulations of the Advisory Council on Historic Preservation (36 CFR 800) or a memorandum of agreement negotiated with the Council.

In most cases, adverse effects to National Register quality sites are avoided by relocating ground-disturbing activities. Where relocating a planned project is not feasible, mitigation of adverse effects to significant cultural properties may be necessary. Mitigation will usually be an attempt to extract and preserve those attributes of a site which qualify it for the National Register. For example, many prehistoric sites are significant for the information they may provide about ancient Indian life ways and cultural adaptations. Various levels of site recording, excavation, and analysis can often retrieve the important information, preserving it in records and reports.

Sites with sociocultural values or aesthetic and recreational values suitable for public interpretation may be more difficult to mitigate by data recovery. Decisions about the treatment of such sites will be made on a case-by-case basis in consultation with the State Historic Preservation Officer.

Summary of Alternatives, Environmental Consequences, and Environmental Preferability

Four multiple use alternatives for the management of public lands in the Spokane District were developed and analyzed in accordance with the Bureau of Land Management's planning regulations issued under authority of the Federal Land Policy and Management Act of 1976 (FLPMA). The alternatives responded to four issues: Grazing Management, Land Tenure Adjustment, Access to Public Lands, and Recreation Management. These issues were identified through the planning process. The purpose of the proposed alternatives was to present and evaluate options for managing, protecting, and enhancing public resources.

These alternatives were a master plan that provided a framework within which future, more site-specific decisions could be made.

The four alternatives considered were:

Alternative A (Production)

This alternative emphasized economic benefits to the local economies. Multiple use management emphasized the production of goods and services on public lands within the Spokane RMP area to meet local and possibly regional demands.

This alternative also addressed the development of allotment management plans (AMPs) and/or coordinated resource management plans (CRMPs) for the improve (I) category allotments to establish livestock use levels, grazing systems, seasons of use, and range improvements to enhance livestock production. CRMPs for the public land outside of the I and maintain (M) allotments would have also been developed. Livestock grazing was emphasized where conflicts with other major resource values were minimal. Authorized livestock use was adjusted for the 16 I category allotments to achieve 70 % utilization of key forage species. (See pages 24 and 25 for a description of the grazing allotment categories.)

The sustainable timber harvest level was based on 46,076 acres of commercial forest land. The sustainable harvest levels was evaluated at 4.12 MM bd. ft. annually or 41.2 MM bd. ft. for the decade. The sale of woodland forest products would be emphasized.

Alternative B (Proposed Resource Management Plan)

The proposed Resource Management Plan (RMP) emphasized the management, production, and use of renewable resources on the majority of the public lands in the Spokane District. Management was directed toward providing a flow of renewable resources from the public lands on a sustained yield basis. This alternative represented the Bureau's favored management approach.

Grazing leases were authorized at the 1982 total preference level of 30,073 AUMs. Management systems were to be developed, maintained, or revised for the 16 I category allotments.

This alternative stressed development of AMPs and/or CRMPs for the I allotments to establish livestock use levels, grazing systems, seasons of use, and range improvements to accomplish multiple use objectives of livestock forage production, wildlife habitat, and watershed needs. CRMPs for the public land outside the I and M allotments would also have been developed. A moderate level of livestock use to maintain or protect other resource values was emphasized. Authorized livestock use would initially remain at currently authorized levels for the 16 I category allotments but would be adjusted through collection and analyses of monitoring data to achieve 50 % utilization of key forage species.

The sustainable timber harvest level was based on 44,443 acres of commercial forest land. The sustainable harvest level was calculated at 3.98 MM bd. ft. annually or 39.8 MM bd. ft. for a ten-year period. Woodland forest products would be sold where consistent with other resource values.

Approximately 40,000 acres were identified for acquisition through land exchanges with the State of Washington and private parties over the next four years. There would be approximately 20,000 acres of public land offered to facilitate these exchanges.

Exchanges and transfers to other federal agencies would take place when natural resource values would benefit.

Alternative C (Protection)

This alternative emphasized protection, maintenance, and enhancement of the natural environment within the planning area. The enjoyment and use of the natural environment for present and future generations, both locally and nationally, would be emphasized.

This alternative stressed development of AMPs and/or CRMPs for the I allotments to establish livestock use levels, grazing systems, seasons of use, and range improvements to accomplish wildlife, watershed, and other objectives related to enhancement of natural values. CRMPs for the public land outside the I and M allotments would have also been developed. A lower level of livestock use to enhance natural values was emphasized. Authorized livestock use was adjusted for the 16 I category allotments to achieve 30 % utilization of key forage species.

The sustainable timber harvest level was based on 37,247 acres of commercial forest land. The sustainable harvest level was calculated at 3.33 MM bd. ft. annually or 33.3 MM bd. ft. for the decade. Multiple use constraints on forest management activities and commercial forest land set-asides were expanded. Important forest habitat values were to be preserved. Sales of woodland products were to be restricted to protect other resource values.

Land exchanges in the scattered tracts were to be conducted to acquire land within Juniper Dune Wilderness (850 acres), area of critical environmental concern (ACEC) inholdings (5,120 acres), and land with special values in the other 11 management areas (5,000 acres).

Alternative D (No Action)

This alternative allowed for the management and flow of outputs from the public lands and resources in the planning area at their present levels. The planning area was operating under Management Framework Plans (MFPs) that were developed from 1977 through 1981. Formal management direction is derived from these MFPs.

This alternative called for implementation of AMPs and/or CRMPs for two I allotments and custodial management for the 14 remaining I allotments. Currently authorized use levels would be maintained except where adjustments were planned in existing activity plans.

There were 44,707 acres of commercial forest lands on which the sustainable harvest level was based. The annual sustainable harvest level was 4.0 MM bd. ft. annually or 40 MM bd. ft. for the decade. Woodland products were offered for sale based upon demand.

Table 1-2 displays the priority in which the resource programs would be emphasized in the 13 management areas. For example, under Alternative B in the Douglas Creek Management Area, recreation has top priority with wildlife habitat, grazing, and soil and water following in second, third, and fourth priorities respectively. Priorities reflect the order in which funds for the different resource management programs would be allocated in annual work plans. See Table S-1 for a summary of the long-term environmental consequences and resource allocations.

Environmental Preferability of the Alternatives

Environmental preferability is judged using the criteria in the National Environmental Policy Act of 1969 (NEPA). Title I, Section 101(b) of NEPA establishes the following goals:

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

2. Assure for all Americans a safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports a diversity and variety of individual choice;

5. Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

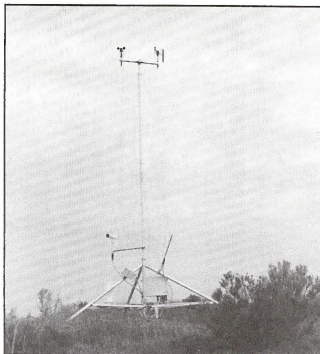
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Table 1-2 Program Emphasis by Management Area

Alternatives	Management Areas						
	Similkameen	Conconully	Jameson Lake	Douglas Creek	Saddle Mountains	Rattlesnake Hills	Badger Slope
Alternative A (Production)	Grazing Recreation Forest	Grazing Recreation Forest	Grazing Recreation	Grazing Recreation	Grazing Minerals Recreation	Grazing Recreation	Grazing Recreation
Alternative B (Proposed RMP)	Grazing Recreation Forest Wildlife Habitat	Wildlife Habitat Grazing Recreation Forest	Wildlife Habitat Grazing Recreation	Recreation Wildlife Habitat Grazing Soil and Water	Minerals Grazing Recreation Wildlife Habitat Soil and Water	Grazing Recreation Wildlife Habitat	Grazing Recreation Wildlife Habitat
Alternative C (Protection)	Wildlife Habitat Grazing Recreation Forest	Wildlife Habitat Grazing Recreation Forest	Wildlife Habitat Cultural Resources Recreation	Wildlife Habitat Grazing Recreation	Soil and Water Grazing Recreation	Grazing Recreation	Wildlife Habitat Grazing Recreation
Alternative D (No Action)	Grazing Recreation Wildlife Habitat Forest	Grazing Recreation Wildlife Habitat Forest	Grazing Recreation Wildlife Habitat	Grazing Recreation Wildlife Habitat Soil and Water	Grazing Recreation Soil and Water Minerals	Grazing Recreation Wildlife Habitat	Grazing Recreation Wildlife Habitat

The Preferred Alternative (Alternative B) in the EIS ranked first in overall preferability. It was believed to be in compliance with all NEPA goals, especially goals 1, 3, 5, and 6. The next environmentally preferable alternative was the Protection Alternative (Alternative C). This alternative was in greater compliance with goal 2 than the Preferred Alternative; however, it did not comply as well with goals 5 and 6 when compared to the Preferred Alternative.

The Production Alternative (Alternative A) was in greatest compliance with goal 6 and to a lesser degree goals 1 and 5 because of its emphasis on maximum productivity. The continued present management or No Action Alternative (Alternative D) was in compliance with goals 2 and 4 because it maintains current conditions. This alternative was, to a lesser degree than the Preferred Alternative, in compliance with goals 1, 3, 5, and 6. However, because it made little attempt to enhance environmental quality of diversity and did not improve social or economic well being, it was not preferred.



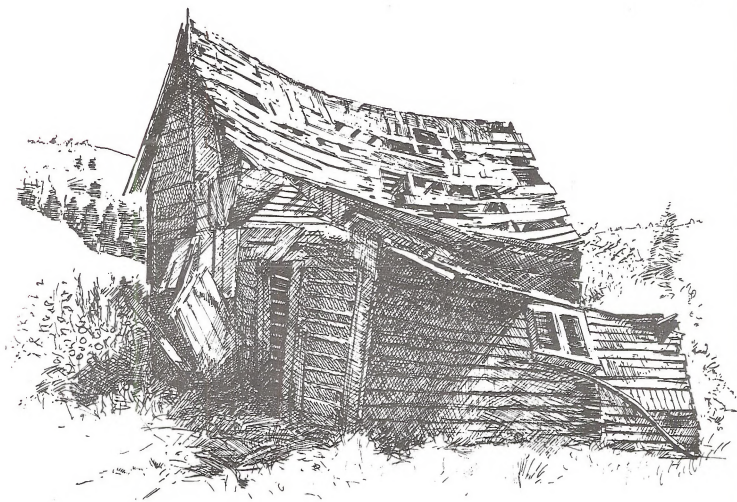
Automated weather station located in the Juniper Forest Management Area.

Table 1-2 (continuation)

Alternatives	Management Areas					
	Rock Creek	North Ferry	North Stevens	Huckleberry Mountains	Juniper Forest	Scattered Tracts
Alternative A (Production)	Recreation Wildlife Habitat Grazing Forest	Forest Grazing Recreation	Forest Grazing Recreation	Forest Recreation	Grazing Recreation	Lands Grazing Recreation Forest
Alternative B (Proposed RMP)	Recreation Wildlife Habitat Forest	Forest Wildlife Habitat Recreation	Forest Grazing Recreation	Forest Wildlife Habitat Recreation	Grazing Recreation	Lands Grazing Recreation Forest
Alternative C (Protection)	Wildlife Habitat Recreation	Wildlife Habitat Cultural Resources Recreation Forest	Wildlife Habitat Grazing Recreation Forest	Wildlife Habitat Cultural Resources Recreation Forest	Wildlife Habitat Grazing Recreation	Lands Grazing Recreation Forest
Alternative D (No Action)	Grazing Recreation Wildlife Habitat Soil and Water Forest	Forest Wildlife Habitat Recreation Grazing	Forest Grazing Recreation	Forest Wildlife Habitat Recreation	Grazing Recreation	Lands Grazing Recreation Forest

Chapter 2

Spokane Resource Management Plan Decisions



Introduction

This chapter describes the Resource Management Plan. Management actions were selected on the basis of their ability to resolve the issues raised during the planning process, satisfy planning criteria and public input, and mitigate environmental consequences.

The plan is the preferred alternative, Alternative B, identified in the Spokane Resource Management Plan and Environmental Impact Statement (RMP/EIS). There were no significant changes made to the proposed plan described in the Final RMP/EIS.

Approval of the RMP marks the completion of one stage of the planning process. The RMP is not a final implementation decision on actions which require further specific plans, process steps, or decisions under specific provisions of law and regulations. More site specific plans or activity plans, such as habitat management plans (HMPs), will be done through the resource activity programs. Procedures and methods for accomplishing the objectives of the RMP will be developed through the activity plan. Further environmental analyses will be conducted, and additional engineering and other studies or project plans will be done if needed.

Goals and Objectives of the Proposed Plan

Goal: Provide a variety of uses within the sustained yield capability of the resource. This plan presents a combination of renewable and nonrenewable resource uses, incorporating the necessary constraints for protecting resources from irreversible decline.

Trade-offs would safeguard nonconsumptive uses while accommodating consumptive uses.

General Management Objectives

1. Protect or enhance water quality with particular attention to those watersheds with major downstream water uses including anadromous and other sport fisheries and agriculture.
2. Maintain and/or improve range productivity by providing available forage to maintain existing or target wildlife populations as estimated by the Washington State Department of Game. The remaining forage would be provided for livestock. Allow for the maintenance of all existing improvements. Implement management systems and all range improvements in allotments where projects and/or management systems are cost effective. Improve riparian habitat through management of livestock use.
3. Adjust the level of sustained yield timber production by restricting production on specific forest lands,

where appropriate, to accommodate other resource values. Forest lands would be withdrawn from production only when stipulations and/or mitigation would not adequately protect the other resources.

4. Keep public lands open for exploration/development of mineral resources, rights-of-way, access, and other public purposes with consideration to mitigate designated resource concerns.
5. Enhance BLM land pattern and resource management efficiency through land tenure adjustments. Identify opportunities for jurisdictional transfers and develop leases or cooperative management agreements with other agencies or private individuals to improve management efficiency.
6. Manage upland habitat for nongame and game species to meet Washington State Department of Game population targets.
7. Manage public lands and keep access routes open for a variety of recreational opportunities/experiences, including both motorized and nonmotorized recreation activities.
8. Consider the protection and/or enhancement of state listed threatened or endangered species habitat.

Delineation of Management Areas

The Spokane District has been divided into 13 management areas: seven are located in the Wenatchee Resource Area and five in the Border Resource Area. The 13th management area consists of scattered tracts of public land in both resource areas. See Maps 1-5.

Management area boundaries separate areas which, because of different resource values and/or management opportunities or constraints, require different management guidance. The boundaries of the management areas are not absolutely fixed and may be adjusted in the future on the basis of land tenure adjustments or additional information gained during the formulation of activity plans.

Each management area has a specific set of management prescriptions. Management area guidelines, along with the district wide program management guidance, define what the total management direction is and how it would be implemented.

Planned Management Actions Under the Proposed Plan

This section describes the planned actions, outlines what support would be needed, if any, and determines priorities for implementing the planned

actions. The planned management actions will be used as a mechanism to resolve the planning issues displayed in the preferred alternative within the Draft RMP/EIS and the proposed plan in the Final RMP/EIS. These documents are available for inspection in the Spokane District Office.

The priorities were established based on public demands, administration policy, and Department of the Interior and BLM directives. Therefore, these priorities may be revised as policy and directives change. The highest priority for each resource is maintaining its base program. This includes funding normal operating costs, completing administrative duties, and processing public inquiries.

The listed support actions are foreseeable at this time. The need for additional support actions, such as engineering and other studies or specific project plans, may be identified as a result of further planning. All such actions will be designed to achieve the objectives of the RMP. Additional environmental analyses will be conducted, where appropriate, to supplement the analysis in the RMP/EIS.

Land Tenure Adjustment and Access

Exchanges

Most of the public land within the twelve management areas will remain in public ownership and continue to be administered by the Bureau of Land Management, although the transfer of public lands to other public land management agencies will occur if more efficient management of the land will result. The twelve management areas are Similkameen, Conconully, Jameson Lake, Douglas Creek, Saddle Mountains, Rattlesnake Hills, Badger Slope, Rock Creek, North Ferry, North Stevens, Huckleberry Mountains, and Juniper Forest. The highest land tenure adjustment priority will be placed on consolidation of public lands through land exchanges into, between and within the twelve management areas shown on Map 2. Bureau administered lands within the twelve management areas currently under cooperative management agreements, designated as wilderness, wilderness study areas, or as areas of critical environmental concern (including those designated in this plan) totaling 38,448 acres will not be transferred from federal ownership. See Table 2-1.

Exchanges will be made only when the public interest will be well served, giving full consideration to better Federal land management and the needs of the State and local people, including needs for lands for the economy, community expansion, recreation areas, food, fiber, minerals, and fish and wildlife. Acquisition of lands, or interests in lands, will emphasize inholdings or lands adjacent to BLM lands with wilderness; threatened, endangered or sensitive species habitat; high scenic or other recreational values, designated Areas of Critical Environmental

Concern; and other opportunities to consolidate BLM lands within the twelve management areas or improve BLM and public access to other public lands. The value of lands, or interests in lands, to be exchanged shall be equal, or if they are not equal, the values shall be equalized by the payment of money so long as the payment does not exceed 25% of the total value of the lands or interests transferred out of federal ownership.

Prior to the exchange of these lands, site-specific on-the-ground inventories will be conducted and an environmental analysis with opportunity for public review and comment will be prepared. If, as a result of these inventories, any of these lands are found to possess values which would prevent them from meeting the exchange criteria they would be retained and managed by BLM pursuant to the management prescriptions of the management unit where they are located. See Appendix B.

There are approximately 40,680 acres identified for acquisition through land exchanges with the State of Washington and private parties. These areas are listed in table 2-2. This is not an all-inclusive list but is representative of the type of high priority exchanges that will be pursued in the initial RMP implementation.

The Scattered Tracts Management Area contains 123,777 acres of BLM lands in a gross area of 16,640,298 acres. Any land to be acquired within the Scattered Tracts Management Area, will be that which is needed to enhance or protect unique or important public land values such as threatened, endangered or sensitive species habitat, riparian habitat, or other recreation values.

BLM will acquire minimum access as needed to achieve management objectives. The preferred method will be through negotiated purchase of an easement or land exchange. Proposed land acquisitions, including public and administrative access across non-Federal lands, are noted in the specific Management Area Prescriptions which follow.

Sales

A total of 1,672.8 acres of public lands have been reviewed by an interdisciplinary team and, based upon information available to the team at this time, have been found to meet one or more of the sale criteria in FLPMA. However, prior to the sale of any of these lands, site-specific on-the-ground inventories will be conducted to verify this finding and an environmental analysis with opportunity for public review and comment will be prepared. If as a result of these more intensive inventories any of these lands are found to possess values which would prevent them from meeting the FLPMA sale criteria, they would be retained and managed by BLM pursuant to the management prescriptions of the management unit where they are located. See Appendix B.

Table 2-1 Retention Areas

Area Name	County Located	Acreage
Juniper Dunes Wilderness	Franklin	7,140
Chopaka Mountain Wilderness Study Area	Okanogan	5,518
Hot Lakes ACEC (RNA)	Oaknogan	80
Brewster Roost ACEC	Douglas	200
Colockum Creek ACEC	Chelan	80
Rock Island Canyon ACEC	Douglas	1,200
Yakima River Cliffs & Umtanum Ridge ACEC	Yakima, Kittitas	320
McCoy Canyon ACEC	Benton	100
Earthquake Point ACEC	Chelan	40
Roosevelt ACEC	Klickitat	80
Sentinel Slope ACEC	Grant	200
Webber Canyon ACEC	Benton	40
Yakima and Columbia River Islands ACEC	Franklin, Benton	640
Juniper Forest ACEC	Franklin	5,540
All Cooperative Agreement Areas listed in Appendix A		17,270
Total		38,448

Table 2-2 Pending and Proposed Land Exchanges

Note: (1) The following acreages are rounded and approximate.

(2) The "selected" lands are presently BLM administered.

Fiscal Year	Name of Exchange	Acres Offered	Acres Selected	Benefitting Management Areas
A. State (DNR) Exchanges				
1988	DNR - SE	4,000	1,300	Juniper Forest, Douglas Creek, Saddle Mountains
1989	DNR - NE	4,200	2,000	Conconully, Similkameen
B. Private Exchanges				
1987		15,460	3,270	Douglas Creek Juniper Forest, Saddle Mtns. USFS Alpine Lakes W.A.
1988		3,100	2,100	Huckleberry Mtns. Rattlesnake Hills
1989		13,920	11,760	Douglas Creek Juniper Forest Huckleberry Mtns. Rock Creek Douglas Creek Saddle Mountains
Total		40,680	20,430	

All of these parcels are difficult and uneconomic to manage as part of the public lands and, based on staff review as well as public review and comment, are not suitable for management by another Federal department or agency. (None of the tracts were acquired for a specific purpose which is no longer required). Many of the parcels, if sold or exchanged, could serve important public objectives, including expansion of communities or economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values. The BLM bases this determination on data available as of the date of approval of this plan. Prior to disposal, through any means, each parcel will be examined in the field to verify compliance with the disposal criteria listed in Appendix B. This will prevent the inadvertent disposal of public lands, after the date of RMP approval, which contain high federal interest resource values such as a newly listed threatened or endangered plant, bald eagle nest, significant cultural resource, or new mining claim.

Public land will only be sold when the following circumstances exist: (1) it is required by national policy; (2) it is required to achieve disposal objectives on a timely basis and where disposal through exchange would cause unacceptable delays; (3) it is determined that disposal through exchange is not feasible; or (4) it is required to facilitate title clearance.

The preferred method of selling public land would be by competitive sealed bidding by qualifying purchasers. However, modified competitive bidding or direct sale procedures may be used when necessary to avoid jeopardizing an existing use on adjacent land or to avoid dislocation of existing public land users. No land will be sold for a monetary amount less than fair market value, as determined by appraisal.

Disposal of lands will be under the applicable authorities and in the following order of preference:

1. State lieu and State grant selections.
2. State exchanges.
3. Private exchanges.
4. Recreation and Public Purpose patents.
5. BLM/USDA Forest Service jurisdiction transfers.
6. Withdrawals to other Federal agencies.
7. Public sales.
8. Indian allotments.
9. Desert land entries (subject to the Food Securities Act of 1985).

Implementation

The following management area prescription summary will be used as a basis to implement the Land Tenure Adjustment and Access Program.

Similkameen Management Area: Acquire permanent access to Palmer Mountain, with rights for the public, to facilitate management. Conduct the adjustment of land pattern by exchange to reduce

cost of property line determination and to enhance multiple use management.

Acquire nonagricultural lands along the Similkameen River and lands adjacent to the Split Rock Recreation Site at Palmer Lake to improve fishing access.

Conconully Management Area: Conduct the adjustments of land pattern by exchange to reduce cost of property line determination.

Obtain access for recreation activities through land exchanges or easement acquisition as opportunities arise.

Acquire identified key parcels of deer winter range to facilitate management.

Jameson Lake Management Area: Acquire public access through easement purchase or land exchange to the Sulphur Canyon area to allow recreation use of the management unit.

Douglas Creek Management Area: Acquire access (either by exchange or through easements) to the Rock Island Creek land parcels to enhance recreation.

Consolidate ownership to enhance multiple use management.

Acquire state grazing land in grazing allotments 0774, 0775, 0778, 0779, 0782, and 0785 to enhance management and certain private high potential grazing land where present ownership is inhibiting establishment of grazing systems that would increase forage production and enhance multiple use values.

Saddle Mountains Management Area: Acquire 1,500 acres of state grazing land in grazing allotments 808 and 810 to enhance management and 13,000 acres of Burlington Northern land to enhance multiple use of the management area.

Rattlesnake Hills Management Area: Acquire access by pursuing land exchanges to consolidate public land in order to facilitate recreation management objectives. Acquire access with rights to the public if land exchanges do not provide public access by 1990.

Rock Creek Management Area: Conduct land exchange to acquire crucial habitat areas and to enhance recreational management opportunities. Acquire access for management and recreational purposes.

North Ferry Management Area: Adjust land patterns by exchange to reduce cost of survey and property line determination and to enhance multiple use. Acquire permanent access to all public lands to enhance forest management and multiple use.

North Stevens Management Area: Adjust land pattern by exchange to reduce cost of survey and property line determination. Acquire permanent access to all forested public lands to enhance multiple use management.

Huckleberry Mountains Management Area: Adjust land pattern by exchange to reduce cost of survey and property line determination to consolidate landownership into more manageable blocks, to maintain or enhance crucial wildlife habitat areas or recreation opportunities.

Juniper Forest Management Area: Acquire the private land within the Juniper Dunes Wilderness Area and the existing ACEC to provide protection for the natural values of the area.

Acquire access with rights for the public to the management area.

Acquire 5,120 acres of private land to enhance grazing management and other multiple use opportunities.

Badger Slope Management Area: Acquire privately owned grazing land in grazing allotments 0540 and 0544 where present ownership is inhibiting the establishment of grazing systems that would increase forage production.

Acquire riparian areas for the purpose of improving waterfowl and upland game habitat.

Scattered Tracts Management Area: Conserve the potential of rangeland, wildlife and fishing habitat, woodlands, and recreation opportunities. Implement this management emphasis through land tenure adjustments such as exchanges, interagency agreements, special area designations, withdrawals, easements, and leases. Limit sales to adjust land tenure where no special resource values require protection to solve specific use problems. Enter into interagency agreements with the WSDG, WSDNR, or USFS to enhance management efficiency.

Implementation Priority

High

Land tenure adjustments to consolidate or otherwise promote the efficient management of the public land resources, protect and improve valuable wildlife habitat, enhance recreational opportunities, and provide access to public lands; issuance of rights-of-way, small tract leases, and/or other leases permits.

Medium

Sales.

Low

Desert Land Entries

Monitoring

The lands program will be monitored on a yearly basis to determine if the program objectives are being met. These objectives include, but are not limited to, monitoring progress in the following areas: land tenure adjustments in the management areas, cooperative management agreements district wide, access to public lands, trespass abatement, withdrawal revocations, issuance of rights-of-way, issuance of recreation and public purpose patents, land sales, and land exchange.

Support

Support will be needed for conducting land appraisal reports to estimate the value of public land identified for disposal. Support will also be needed to conduct mineral, cultural, and threatened and endangered species resource evaluations. These evaluations will contribute to the environmental analyses on land disposals. Cadastral surveys to delineate specific tracts may be needed in some cases.

Recreation Management

Recreational activities and visual resources will be evaluated as part of the specific activity plans and will be evaluated to determine their appropriateness in relation to the land use allocations made in the Resource Management Plan. BLM management of cultural and historic resources emphasize protection and preservation. See the standard operating procedures in Appendix C.

The evaluation of visual resources will consider the significance of proposed projects and the visual/scenic sensitivity of the affected area. Stipulations will be attached as appropriate to assure compatibility of projects with management objectives for visual resources. Note the definitions and management guidelines for the five visual resource management classes in Appendix C.

Special Management Areas

Nine of the original ten areas proposed for ACEC designation are designated upon adoption of this RMP. In addition to the proposed ACECs this ROD reaffirms the designations of the three existing ACECs. Management plans for these ACECs will be completed or revised within two years (see Tables 2-3).

As additional areas are identified for special consideration, appropriate interim management protection measures will be developed, adopted, and implemented until such a time when formal designation could be made in an RMP amendment or revision.

The proposed Catherine Creek and Rowland Lake ACEC is no longer under BLM administration. This area was included in the recently designated Columbia River Gorge National Scenic Area. All of

Table 2-3 Areas of Critical Environmental Concern*

Area Name	Value	County Located	Acres
Hot Lakes	Merimictic Lake	Okanogan	80
Brewster Roost	Bald Eagle Winter Roost	Douglas	200
Colockum Creek	Fed. Cand. T or E & S species	Chelan	80
Rock Island Canyon	5 Fed. Cand. T or E & S species	Douglas	1,200
Yakima River Cliffs & Umtanum Ridge	Fed. Cand. T or E & S species	Yakima, Kittitas	320
McCoy Canyon	2 Federal Candidate Plants	Benton	100
Earthquake Point	Federal Candidate Plant	Chelan	40
Roosevelt	Federal Candidate Plant	Klickitat	80
Sentinel Slope	Federal Candidate Plant	Grant	200
Webber Canyon	Paleontologic Resources	Benton	40
Yakima and Columbia River Islands	Crucial Nesting Habitat	Benton; Franklin	640
Juniper Forest	Nesting Habitat	Franklin	5,540

*All of the public land administered by the BLM that falls within the boundaries of the Columbia River Gorge National Scenic Area have been remanded to the Secretary of Agriculture, U.S. Forest Service for administration. The proposed Catherine Creek and Rowland Lake ACEC falls within this area. Therefore, it is no longer under BLM administration.

the public lands located in this area are now managed by the U.S. Forest Service.

Off-Road Vehicles (ORV)

Public land within areas identified as open to vehicle use would generally remain available for such use without restrictions. Exceptions may be authorized and implemented at any time after consideration of the following criteria: (1) the need to promote user enjoyment and minimize use conflicts; (2) the need to minimize damage to soil, watershed, vegetation, or other resource values; (3) the need to minimize harassment of wildlife or significant degradation of wildlife habitat; and (4) the need to promote user safety.

Public land within areas identified as restricted to vehicle use will receive priority attention during activity planning. Specific roads, trails, or portions of such areas may be closed seasonally or yearlong to all or specified types of vehicle use (see Table 2-4).

Since there were no changes in the ORV designations from the Final RMP/EIS to this ROD, maps were not included. However, maps identifying these designations are available upon request.

Implementation

The following management area prescription summary will be used as a basis to implement the Recreation Program.

Similkameen Management Area: Develop a recreation management plan for the Chopaka Lake camping area to improve facilities benefiting hunting and fishing activities. Close 5,598 acres to ORV use; restrict ORV use on 5,828 acres to designated roads and trails; restrict ORV use on another 1,270 acres to designated roads and trails from November 15 to March 1. Designate 16,204 acres open to ORV use.

Conconully Management Area: Restrict ORV use on 2,670 acres to designated roads and trails from November 15 to March 1. Designate 8,830 acres as open to ORV use.

Jameson Lake Management Area: Restrict ORV use in Sulphur Canyon to existing roads and trails. Manage the visual resources to maintain the existing visual quality standards. Restrict ORV use on 2,860 acres to designated roads and trails.

Douglas Creek Management Area: Prepare a recreation management plan for Douglas Creek with an emphasis on protecting the existing values rather than development. Restrict ORV use on 4,580 acres to designated roads and trails, and restrict ORV use on another 5,040 acres to designated roads and trails from February 15 to June 1. Keep the remaining public lands in the management area open to ORV

Table 2-4 Resource Management Plan ORV Designations

Management Area	Priority for Implementing ORV Designations	Acres Open	Acres Restricted Seasonally to Designated Roads and Trails	Acres Permanently Restricted to Designated Roads and Trails	Acres Closed to ORV Use
Similkameen	3	16,204	1,270	5,828	5,598 ¹
Conconully	7	8,830	2,670		
Jameson Lake	6	800		2,860	
Douglas Creek	5	12,380	5,040	4,580	
Saddle Mountains	4	4,310		19,990	
Rattlesnake Hills	N.A.	24,735			
Badger Slope	2			7,680	40
Rock Creek	8			6,427	
North Ferry	N.A.	13,000			
North Stevens	N.A.	13,205			
Huckleberry Mountains	N.A.	11,269			
Juniper Forest	1	2,640		7,340	7,140 ²
Scattered Tracts	N.A.	123,137			640 ³
Total	N.A.	230,500	8,980	54,705	13,418

¹Includes the 5,518 acre Chopaka Mountain Wilderness Study Area and the Hot Lakes RNA/ACEC

²The 7,140 acre Juniper Dunes Wilderness Area

³Includes the Yakima and Columbia River Islands ACEC

use and manage visual resources to maintain existing visual quality standards.

Saddle Mountains Management Area: Restrict ORV use on 19,900 acres to designated roads and trails. Designate 4,310 acres as a casual use ORV area on the west end of Saddle Mountains and limit ORV use in other areas to designated roads and trails. Permit a maximum of three races per calendar year. Acquire access through easement acquisition or land exchange to key parcels for recreational rockhounding on Saddle Mountains and in the Johnson Creek area.

Rattlesnake Hills Management Area: Develop an activity plan to manage rock collecting ORV use and hunting. Designate 24,735 acres open to ORV use.

Rock Creek Management Area: Emphasize enhancement of the hunting and rock collection

opportunities for the general public through the development of a recreation management plan. Restrict ORV use on 6,427 acres to designated roads and trails.

North Ferry Management Area: Emphasize maintenance of recreation opportunities in key areas as identified through public input, and/or issues analyses. This may include land exchanges and development of recreation management plans for identified areas. Designate 13,000 acres open to ORV use.

North Stevens Management Area: Emphasize maintenance of recreation opportunities in key areas as identified through public input and/or issues analysis. This may include land exchange and development of recreation management plans for identified areas. Designate 13,205 acres open to ORV use.

Huckleberry Mountains Management Area: Emphasize maintenance of improvement of recreation opportunities in key areas identified through previous planning, public input, and/or issues analyses. This may include land exchanges and development of recreation management plans for identified areas. Designate 11,269 acres open to ORV use.

Juniper Forest Management Area: Manage the existing 14,480 acre ACEC to facilitate protection of the existing natural, scientific, and cultural values. Fence the Juniper Dunes Wilderness boundary and monitor recreational use of the adjacent public lands to determine if additional restrictions are necessary to protect the wilderness values. Allow ORV use on designated roads and trails on 7,340 acres that remain outside the wilderness in the ACEC. ORV use is prohibited, by law, on the 7,140 acres in the Juniper Dunes Wilderness. Designate 2,640 acres open to ORV use. Continue the study of ORV activities and raptor use of the area and develop a Recreation Plan by the end of FY 88 that provides for the long-term ORV management in the area and ensures protection of the wilderness and ACEC objectives.

Badger Slope Management Area: Restrict ORV use to designated roads and trails on 7,680 acres and close 40 acres to ORV use.

Scattered Tracts Management Area: Designate all 640 acres of the Columbia and Yakima River Islands ACEC closed to ORV use.

Implementation Priority

High

- Develop recreation management plans identified for the Simikameen, Douglas Creek, Rattlesnake Hills, and the Juniper Forest Management Areas. Develop ACEC Management Plans for all designated ACECs within two years of the ROD approval.

- Identify the ORV restrictions within the management areas through the use of signs.

Medium

- Develop new recreation facilities identified through the recreation management plans.

Monitoring

Recreational and visual resources will be monitored to determine trends or changes in land use. The monitoring tools will include the use of registration boxes and visitor use surveys to determine visitor use levels. Monitoring tools to determine surface disturbance attributed to recreation will include aerial photographs, and periodic soil and vegetation condition inventories. All of these tools will be used to establish base line data which will be used to determine the limits of acceptable change or to identify the need to improve recreational facilities. The target areas for this monitoring effort will be

developed recreation sites, roads, parking areas, trail heads, trails, and potential picnic areas and campsites.

Support

Support will also be needed to conduct cultural, and threatened and endangered species resource evaluations in association with the issuance of special recreation permits. Acquisition of legal access to public land will be needed to open up areas for recreational purposes. Cadastral survey would be needed to delineate specific tracts of public land. Some engineering support will be needed to aid in design and layout of access roads.

Wildlife and Fish Habitat Management

General

Fish and wildlife habitat management objectives will continue to be evaluated on a case-by-case basis as a part of project level planning (for example: timber sale plans, grazing management plans, recreation management plans, rights-of-way applications, and so forth). Note the standard design features and operation procedures in Appendix C. Evaluations will consider the significance of the proposed projects and the sensitivity of fish and wildlife habitats in the affected areas. Stipulations will be attached as appropriate to assure compatibility of projects with management objectives for fish and wildlife habitat. Protective fences will be constructed in riparian areas, and other habitat improvement projects will be implemented where necessary to stabilize and/or improve unsatisfactory or declining wildlife habitat condition. Such projects will be identified through habitat management plans or coordinated resource management activity plans.

Riparian Habitat

Management actions within riparian habitat areas, wetlands, and flood plains will include measures to preserve, protect, and restore natural functions, as defined by Executive Orders 11988 and 11990. Management techniques will be used to minimize the degradation of streambanks and the loss of riparian vegetation. Bridges and culverts will be designed and installed to maintain adequate fish passage. Roads and other facilities will be designed to avoid riparian areas to the extent that it is practicable. Riparian habitat needs will be taken into consideration when developing livestock grazing systems and pasture designs.

A supplemental inventory evaluation of riparian habitat will be conducted on public lands within three (3) years from the time the RMP is adopted. Habitat vegetation potential and current condition will be assessed for all areas, and management guidelines and objectives will be developed. All high value and high potential habitats in less than good condition will

be managed through implementation of activity plans and projects (such as construction of protective fencing) to allow restoration of native vegetation, increase of plant vigor, and general habitat condition improvement.

Seasonal Restrictions

Seasonal restrictions will be applied to mitigate the impacts of human activities on important seasonal wildlife habitat. Some of the major types of important seasonal wildlife habitat are crucial deer winter range, bighorn sheep winter range and lambing grounds, mountain goat winter range and kidding grounds, sage and sharptail grouse leks, and raptor nesting habitat.

Terrestrial Wildlife Habitat

Sufficient forage and cover will be provided for wildlife on seasonal habitat to maintain existing population levels or target population levels as established by the WSDG. Forage and cover requirements will be incorporated into allotment management plans and will be specific to areas of primary wildlife use.

Range improvements generally will be designed to achieve both wildlife and range objectives. Existing fences may be modified, and new fences will be built to allow wildlife passage. Water developments generally would not be established for livestock where significant conflicts over vegetation would result. Water will be provided when possible in allotments during seasonal periods of need for wildlife.

Vegetation manipulation projects will be designed to minimize impact on wildlife habitat and to improve it whenever possible. The WSDG would have the opportunity to review all proposed actions involving vegetation manipulation projects.

Wildlife reintroductions and fish stocking proposals would be evaluated, and recommendations would be made to the WSDG.

Implementation

The management area prescription summary will be used as a basis to implement the Wildlife and Fish Habitat Management Program.

Similkameen Management Area: Develop a CRMP on Palmer Mountain to improve or maintain crucial mule deer winter range. Protect 6.5 stream miles with high value riparian habitats on Palmer Mountain, Little Chopaka Mountain, Ellemeham Mountain, American Butte, Kruger Mountain, and the shorelines of Chopaka Lake and the Similkameen River.

Conconully Management Area: Identify and protect high value riparian habitats along 2.25 miles of Salmon Creek and 1 mile in Dry Coulee.

Jameson Lake Management Area: Develop an HMP and acquire approximately 1,200 acres of

nonagricultural lands for the purpose of maintaining or improving upland game nesting and wintering habitat. Protect riparian habitat in Sulphur Canyon.

Douglas Creek Management Area: Expand existing HMP to cover the entire Douglas Creek Management Area. Improve wildlife habitat in the Douglas Creek riparian area by management of the plant cover through the existing Habitat Management Plan which includes planting of shrubs and grasses, control of noxious weeds, and exclusion of cattle grazing from specific areas. Protect and improve the condition of high value riparian habitat along Rock Island Creek (1.5 miles), Sutherland Canyon (3 miles), Skookumchuck Creek (1 mile), and Rattlesnake Creek (0.5 mile).

Saddle Mountains Management Area: Protect and improve high value riparian habitat along Johnson Creek (1 mile) and six (6) miles of its tributaries.

Rattlesnake Hills Management Area: Develop an HMP to maintain or improve key species concentration areas. Identify and protect high value riparian habitat in Washout Canyon (1 mile).

Rock Creek Management Area: Develop an HMP to emphasize enhancement of game species habitat. Protect and improve riparian habitat along Squaw Creek (1.5 miles), Rock Creek (5 miles) and riparian areas acquired through land exchanges.

North Ferry Management Area: Emphasize maintenance or improvement of key species habitat areas identified through previous planning, public input, and/or issues analyses. This may include land exchanges to facilitate protection of these areas and development of HMPs. Protect and improve riparian habitat on BLM administered land along 7 miles of perennial streams and the Kettle River.

North Stevens Management Area: Protect and improve 4.5 miles of riparian habitat along perennial streams and the Columbia and Kettle Rivers.

Huckleberry Mountains Management Area: Emphasize maintenance or improvement of key wildlife habitat areas, such as critical deer winter range, identified through previous planning, public input, and/or issues analyses. This may include land exchanges to facilitate protection of these areas and development of HMPs. Protect and improve the 2.5 miles of riparian habitat along perennial streams that cross public land.

Juniper Forest Management Area: Implement the HMP to emphasize maintenance or improvement of raptor and upland game habitat. Allocate forage to livestock to minimize conflict with wildlife habitat management objectives.

Badger Slope Management Area: Develop a CRMP for this area with provisions to improve and

protect raptor and upland game habitat. Develop an HMP on 1,000 acres of the area for the purpose of improving upland game habitat. Protect riparian habitat in Webber Canyon (2.5 miles) and protect and improve riparian habitat in Sec. 30, T. 9 N., R. 26 E.

Scattered Tracts Management Area: Identify and protect valuable wildlife habitat through management of livestock, ORVs, and other resource uses. Protect and improve high potential riparian habitats. Inventory small acreages for high value riparian habitats. Develop and implement HMP for riparian habitat protection or enhancement.

Implementation Priority

High

Actions taken through an HMP that affect riparian areas or threatened or endangered species habitat. Monitoring existing HMPs. Assessment of actions affecting wildlife habitat. Protection of unique or sensitive species habitat.

Medium

Complete statewide cooperative Sikes Act HMP. Monitor important habitat of other species such as mule deer, elk, pheasant and other game and non-game species.

Low

Manage non-critical habitats with significant values.

Monitoring

Habitat management plans will be prepared prior to implementation of specific activities for habitat improvement. HMPs will contain sections on monitoring techniques for various activities. These will evaluate habitat condition and trend against resource objectives.

Wildlife habitat monitoring will consist largely of recording repeated observations of the physical and biological habitat components being manipulated by an action. This may be as simple as using photo stations or as complicated as a complete ecological study. Each action will be monitored to assess degree of success or failure measured against management objectives.

Monitoring priorities will follow general management priorities discussed previously. Each HMP will discuss and rank by priority monitoring efforts as part of the management scenario for a particular geographic area.

Support

Support and cooperation from the WSDG, private sportsmen's groups, and others will be an integral part of the habitat management program.

Internal support from Bureau specialists (i.e., lands, forestry, recreation, and range management) will also be required.

Extensive coordination with other federal, state, private agencies, and groups will be carried out as needed during day-to-day program operation.

Endangered, Threatened, or Sensitive Species Habitat

Prior to any vegetation or ground disturbing manipulation projects, the BLM requires a survey of the project site for plants and animals listed or proposed for listing as threatened or endangered, or their critical habitats.

For sensitive proposed, or candidate T/E species, it is Bureau policy to ensure that the crucial/essential habitats be considered (managed and/or conserved) in all management decisions to minimize the need for future listing by either Federal or state governments. Sensitive species will be accorded special management consideration as if they were officially listed pursuant to the Endangered Species Act of 1973. It may be determined by the District Manager, on a case-by-case basis, that verified data concerning a species is adequate to allow the planned action. If not, approval by the State Director is required before an action can proceed.

It is BLM policy to maintain viable populations of proposed or sensitive species until such time as a final determination on the status of each species is made by the U.S. Fish and Wildlife Service (USFWS).

Activities will not be permitted or implemented in habitat important for listed threatened or endangered species, or for proposed, candidate, or State-listed sensitive species, if such activities are likely to jeopardize the existence of the species in the area in question.

If BLM determines that a proposed action "may affect" the habitat or the T/E species in question, formal or informal consultation with FWS would be initiated per 50 CFR, 402; ESA 1973, as amended.

An effort will be made to modify proposed actions that "may affect" habitat or species in order to achieve a "no effect" biological opinion from FWS. If the action cannot be adequately modified, it may be abandoned or relocated.

Whenever possible, management activities in habitat for endangered, threatened, or sensitive species would be designed specifically to benefit those species through habitat improvement or protection.

The Washington State Department of Game (WSDG) and Department of Natural Resources/Washington

Natural Heritage Program (WSDNR/WNHP) may be consulted along with the USFWS prior to implementing projects that may affect habitat for state listed endangered, threatened, or sensitive species.

Forest Management

Manage 54,757 acres of commercial forest land within 7 of the 13 management areas for the commercial trees species (see Tables 2-5 and 2-6). This includes 41,443 acres available for full timber production and 13,314 acres on which timber management practices and yields will be constrained for multiple use purposes. Major commercial tree species include Ponderosa pine, Douglas fir, Grand fir, Lodgepole pine Western larch, Engelmann spruce, and Western white pine. Management woodlands for forest products when consistent with other resource uses (Woodland is forest land which is not included in commercial forest land intensive timber production base and also includes all fragile non-suitable land, non-commercial forest land and non-suitable commercial forest land. Woodland forest products will only be sold from lands that are biologically capable of supporting a sustained yield of forest products).

A harvest level of 3.98 MMbf annually is planned based on existing inventories; however, a sustainable harvest level will be calculated in 1987 in conjunction with a forest inventory which is underway. The actual volume offered may be less than the full timber harvest potential, depending upon the number of

acres allocated to other uses and the operational constraints built into this land use plan in order to meet multiple use objectives, especially critical wildlife forage and cover areas, streams identified as supporting fisheries, and areas of high visual sensitivity. Note the standard operating procedures and design features in Appendix C.

Manage forest land to minimize losses or damage to commercial tree species from insects and disease. Develop road systems and manage for harvest of commercial tree species.

Pre-commercially thin public forest land where feasible and when adequate funding allows. Slash will be removed near roads where it poses a potential fire hazard. The preferred method of disposing of slash will be with the use of prescribed fire. Heavy concentrations of standing dead and down material would be disposed of through a fuel wood sale program.

The 1,710 acres of uncut forestland, identified in Table 2-7, will not be subject to timber harvest until an interdisciplinary team of BLM natural resource specialists evaluate the attributes of these parcels. Areas that are identified as possessing unique or important natural resource values will be set aside, and appropriate interim protective measures would be undertaken. This evaluation would be made within five years from the time the RMP is adopted.

Table 2-5 Management Area Prescription/Derivation of Timber Production Base Acreage

	Management Areas							Total
	Stimilkameen	Conconully	Rock Creek	North Ferry	North Stevens	Huckleberry Mountains	Scattered Tracts	
Total Forestland Acres	8,353	4,055	748	8,353	12,858	10,770	6,620	51,757
Commercial Forest	6,108	2,376	748	7,697	12,321	10,494	5,815	45,559
Non Commercial Forest (Woodlands)	371	951	0	5	289	63	805	2,484
Non Operable	1,874	728	0	651	248	213	0	3,714
Multiple Use Set Aside								
Riparian	58	25	33	20	42	38	200	416
Wildlife Habitat	230	99	108	82	165	147	788	1,619
ACEC	0	0	0	0	0	0	161	161
Lands Available for Restricted Management of Forest Products	268	115	154	96	192	173	922	1,920
Lands Available for Intensive Management of Forest Products	5,552	2,137	453	7,499	11,922	10,136	3,744	41,443
Approximate Decadal Timber Harvest Level (MMbF)	5.33	2.05	0.44	7.2	11.45	9.74	3.59	39.8
Approximate Sustainable Decadal Harvest Level (acres) (10)	0	0	0	0	0	0	0	0

Table 2-6 Forest Management Practices and Land Use Allocations Under the Plan

	Proposed RMP
Intensive Timber Production Base (acres)	44,443
Decade 1 Harvest	
Total Million bd. ft.	39.8
Total Million cu. ft.	6.5
Treatments	
Transportation System (miles/acres)	
New Construction	39/76
Reconstruction	37/72
Timber Harvest (acres) ¹	6,125
Timber Harvesting Methods (acres)	
Cable	3,275
Tractor	2,850
Site Preparation (acres)	
Slash Disposal	
Broadcast Burn	152
Pile and Burn	958
Lop and Scatter	5,015

Note: These figures are estimates based upon the current 5-year timber sale plan. These estimates were made to facilitate impact analysis highlighting differences between alternatives. Although actual acreages may vary with implementation the relationship between alternatives is expected to remain unchanged.

¹Includes both partial cut and clearcut areas. Clearcut acreages are primarily for roads, landings, blowdown salvage, etc., and usually average less than 10 % of total harvest acres.

Table 2-7 Uncut Timber Stands (40 Acres in Size or Larger)

Management Area	Legal Description	Acres
Similkameen	T. 39 N., R. 27 E., sec. 17 SE1/4SW1/4	40
	T. 39 N., R. 26 E., sec. 30 E1/2E1/2	100
	T. 40 N., R. 25 E., sec. 32 E1/2NW1/4, W1/2NE1/4	70
North Stevens	T. 39 N., R. 40 E., sec. 21 E1/2E1/2	130
	sec. 22 S1/2N1/2, S1/2	400
	sec. 23 S1/2NW1/4, SW1/4	200
	sec. 24 NE1/4	120
	sec. 26 N1/2NW1/4, NE1/4SW1/4	100
	sec. 31 S1/2NW1/4	80
	T. 40 N., R. 41 E., sec. 28 S1/2NW1/4, N1/2SW1/4	140
	sec. 29 E1/2SE1/4	80
Scattered Tracts	T. 38 N., R. 43 E., sec. 18 SE1/4NW1/4	40
	T. 39 N., R. 43 E., sec. 2 E1/2NW1/4	40
	sec. 21 S1/2NE1/4	50
	T. 40 N., R. 43 E., sec. 26 NW1/4	120
Total Acres		1,710

Implementation

Activity plans will define the resources for the planning area, state specific management objectives, specify planned actions, coordinate various resource values, and identify harvest levels, cutting cycles, and silvicultural practices for the commercial forest or woodland resource.

Timber and fuel wood sales, timber stand improvement (e.g., thinning), reforestation, slash disposal, and road construction are examples of specific actions proposed in activity plans. Manuals and policy will offer other specific guidance for implementation of these actions. Environmental analyses and forest plans will further identify project implementation and mitigation measures.

Commercial forest and woodland products will be offered for sale. Competitive bidding will be the preferred method for selling commercial timber. Fuelwood, posts, poles, and boughs will be sold to the general public (see Table 2-6).

Implementation Priority

High

Revise and update existing timber management plan to reflect management direction of the resource management plan.

Medium

Prepare woodland management plan for large tracts of manageable woodland. Factors considered when determining the priority of management areas include:

- Accessibility to product and market;
- Demand for woodland products;
- Opportunities to complement other resources.

Low

Designate selected areas for post, pole, and fuel wood permit areas in lieu of preparation of woodland management plan.

Monitoring

The basic process of monitoring for forest practices involves on-site inspection of the project. Generally, a pre-work conference is conducted to familiarize the contractor or purchaser with the project area, contract requirements, and other project specifics. During the project life, periodic inspections of the work performance and progress are conducted by the forester. At the end of the project, a final inspection is generally conducted to check for work quality and proper completion of all contract requirements. An assessment of the project is made at that point, and recommendations for amending future like projects are made to ensure future successes and streamlining.

Support

Cadastral survey and some engineering support will be needed to aid design and layout of timber sales and access roads. Fire management support will be needed for management of natural fire in meeting forest management resource objectives. Acquisition of legal access to public land will be needed to open areas for commercial forest land management. Legal access to public land to open areas for fuel wood will be acquired only if the access also benefits other resource values.

Range Program Summary

Grazing Management

Continue present management on 182,424 acres (374 allotments) of public land to benefit livestock and wildlife. Existing structural and nonstructural range improvements will be maintained throughout the planning area. These allotments include the Maintain (M) and Custodial (C) category allotments.

The M allotments are usually those where satisfactory management has already been achieved through conservation plans, coordinated resource management plans, or cooperative agreements with adjoining landowners.

Most of the C allotments are unfenced, small tracts which are intermingled with much larger acreages of non-BLM rangelands, thus limiting the BLM's management opportunities.

During the analysis of the management situation of these lands, it became evident that a portion of the C Allotments have a potential for improved management to modify ecological conditions for livestock forage, wildlife habitat, and/or watershed protection. However, the costs of fencing these parcels and developing water so that they can be intensively managed for livestock forage are prohibitively high. These allotments do have a potential for more intensive management if cooperation with the grazing lessee and other landowners in the management of all lands in the allotment can be obtained or if BLM can gain sufficient manageability by acquiring land within the allotment through land exchanges. Once cooperation or manageability is attained, those respective allotments may move to the I category. Therefore, the Custodial category was further divided into C1 and C2 allotments. The C1 designation will allow, through increased cooperation or improved manageability through land acquisition, for improved management and BLM investment in range improvements. Allotments categorized as C2 would remain under custodial management.

Implement range improvements such as fences, pipelines, water developments, springs, seedings, and brush control actions in Improve (I) category allotments to benefit range and riparian habitat

conditions. This would affect a total of 50,385 acres of public land in the 16 I category allotments.

The I allotments are usually areas which have a potential for resource improvement where BLM controls enough land to implement changes. Other I allotments have ongoing intensive management planning efforts which are being cooperatively developed by all landowners in the allotment. (See Table 2-8 and Appendix D for a summary and listing of allotment categorization.)

Develop or revise 16 management plans (AMPs or CRMPs) on I category allotments and in cooperation with the grazing lessees and other interested parties. Each allotment's proposed range development program was subjected to a Rangeland Investment Analysis. This analysis process was used to design and evaluate the economic efficiency of various combinations of range improvements and management actions. Table 2-9 displays proposed range projects for the I category allotments. See Appendix C for a description of standard design features for range improvements.

Table 2-8 Summary of Allotment Categorization

Category	Number	Acres	Existing Authorized Use AUMs
Maintain	36	31,312	4,267
Improve	16	50,385	5,691
Custodial C1	79	88,776	11,728
Custodial C2	259	62,336	8,387
Unallotted	0	74,794	0
Totals	390	307,603	30,073

Table 2-9 Range Improvements by Allotment (I Category Allotments Only)

Management Area	Allotment No.	Seeding (Acres)	Brush Control (Acres)	Fence (Miles)	Spring Developments (No.)	Pipelines Miles	Catchments (No.)	Cattle-guards (No.)	Stock Tanks (No.)	Wells (No.)
Similkameen	0701	47	0	1.5	0	0	3	0	0	0
	0704	0	0	3.5	3	0	0	2	3	0
	0705	0	0	0.0	3	0	0	4	3	0
	0707	47	0	2.0	2	0	0	0	2	0
Subtotal		94	0	7.0	8	0	3	6	8	0
Conconully	0735	0	0	2.0	0	0	0	0	0	0
	0737	0	0	0.0	1	0	0	0	1	0
Subtotal		0	0	2.0	1	0	0	0	1	0
Douglas Creek	0778	0	0	5.0	1	1	0	0	2	0
Saddle Mountain	0806	593	0	2.5	0	0.5	0	0	2	0
	0808	0	167	5.0	0	3.0	0	0	2	0
	Subtotal	593	167	7.5	0	3.5	0	0	4	0
Badger Slope	0540	257	0	5.0	2	3	0	0	3	0
	0544	0	0	2.0	1	0	0	0	1	0
	Subtotal	257	0	7.0	3	3	0	0	4	0
North Stevens	0683	0	0	1.0	1	0	0	0	1	0
Juniper Forest	0535	0	0	0.5	0	0	0	0	1	0
	0536	0	0	0.0	0	0	0	0	1	1
Subtotal		0	0	0.5	0	0	0	0	2	1
Scattered Tracts	0721	0	0	0.5	0	0.5	0	0	2	0
	0846	0	0	1.5	1	0.0	0	0	1	0
Subtotal		0	0	2.0	1	0.5	0	0	3	0
Grand Total		944	167	32.0	15	8.0	3	6	25	1

Livestock grazing administrative functions will continue. This includes the issuance of grazing leases, processing lease transfers, establishing and interpreting range monitoring studies, conducting field examinations, supervising allotments, processing trespass actions, making public contacts, and completing benefit/cost analysis studies for proposed range improvement projects. Available funding for range improvements and structures will generally be expended in the following priority based on allotment categorization: (1) Improvement allotments; (2) Maintain allotments; (3) Custodial allotments. Those allotments in the Improve category, where a need for adjustments in livestock grazing capacity is identified in this plan, will receive the highest priority for monitoring and generally the highest priority for "Allotment Management Plan" preparation (if applicable) and installation of range improvements. Note that recategorization of allotments, particularly Custodial-1 into Improve is quite possible. Recategorization, rangeland program progress and other relevant information will be reported to the public through published periodic Rangeland Program Summary updates.

Implementation

Implementing the livestock grazing portion of this plan will require several separate actions that overlap in time, some of which are underway. These actions include: allotment recategorization; development of AMPs/CRMPs; monitoring of range conditions and trend; determination of stocking levels; forage use decisions; and monitoring to determine if selective management criteria are being fulfilled.

Implementation Priority

High

- Implement CRMPs/AMPs on allotments with partially completed AMPs/CRMPs.
- Implement CRMPs/AMPs on Improve category allotments.
- Monitor Improve category allotments to establish stocking rates and evaluate the effects of intensive management.
- Issue grazing decisions for Improve category allotments where adjustments in stocking rates are negotiated with the lessee.

Medium

- Monitor the effects of livestock grazing upon Maintain category allotments.
- Implement CRMPs on C1 category allotments.

Low

- Monitor the effects of livestock grazing upon C category allotments.

Monitoring

The effects of implementation will be monitored and evaluated on a periodic basis over the life of the plan. The general purposes of this monitoring and evaluation will be to accomplish the following:

1. To determine if an action is fulfilling the purpose, need, and objectives for which it was designed or if there is a need for modification or termination of an action;
2. To discover unanticipated and/or unpredictable effects;
3. To determine if mitigation measures are working as prescribed;
4. To ensure that decisions are being implemented and scheduled;
5. To provide continuing evaluation of consistency with state and local plans and programs;
6. To provide for continuing comparison of plan benefits versus costs, including social, economic, and environmental; and
7. To determine livestock stocking levels.

A document, entitled "Rangeland Monitoring in Oregon and Washington," has been developed and adopted as a guidance document. This document provides a framework and minimum standards for choosing the timing and study methods to collect the information needed to issue and implement specific management decisions which affect the grazing management, watershed, wildlife, and threatened and endangered species programs. Copies of this document are available upon request from the Spokane District and Wenatchee Resource Area Office.

For the grazing management program, highest priority for monitoring will be focused on the Improve (I) category allotments. Monitoring studies will be conducted annually for forage utilization, actual use (livestock numbers and periods of use), and climate. Vegetative trend studies were established and recorded in 1986. The trend studies will be recorded every five years (at minimum) after initial establishment to detect changes in the vegetal community. After five years of data collection, results will be analyzed and evaluated for each of the Improve category allotments. Where adjustments in stocking rates, seasons of use, and/or grazing systems are needed to achieve the objectives of the RMP and AMPs, the needed adjustments will be made through agreements with the grazing lessees or by decisions where necessary. The allotments will also be monitored beyond these five years to make adjustments as necessary. If it becomes apparent that objectives are being achieved, the I category allotments may be reclassified to the Maintain (M) category.

M category allotments will receive less intensive monitoring to insure that management continues to

be satisfactory. Minimum levels of monitoring will include: annual collection of actual use and climatic data, collection of utilization data every three years, and reading of trend studies every ten years. If monitoring indicates that unexpected adverse impacts are occurring, the allotment(s) may be reclassified to the I category and corrective management actions taken.

Custodial (C) category allotments will receive the least intensive monitoring. At a minimum, monitoring will include annual collection of climatic data and completion of trend studies on a ten-year schedule. If the analysis of monitoring data indicate a potential for improved management and/or critical resource values which are being threatened by livestock grazing, BLM will reclassify the allotment into the I category and intensify its management.

Support

Fire management support will be required for project layout, design, and implementation for vegetative manipulation through prescribed fire. There would be a support need for survey and design features for range improvement and vegetative manipulation projects, and benefit/cost analyses for those range improvements (see Table 2-9). Water rights will be secured for water developments. Coordination would occur with lessees and affected parties on livestock manipulation and development or refinement of management plans.

Ongoing Management Programs

Other ongoing BLM resource management programs and actions discussed in the proposed plan will continue. This section briefly describes these programs and management actions to eliminate confusion regarding their status relevant to the RMP.

Soil, Water, and Air Management

The inventory and evaluation of soil, water, and air resources on public lands will continue. Soils will be managed to maintain productivity and to minimize erosion. Corrective actions will take place, where practicable, to resolve erosive conditions. Water sources necessary to meet BLM program objectives will be developed and filed on according to applicable state and federal laws and regulations. Water quality of perennial streams will continue to be monitored, and climatological data will continue to be gathered.

Noxious Weed Control

Infestations of noxious weeds are known to occur on some of the BLM lands. The most common noxious weeds are diffuse knapweed, spotted knapweed, Russian knapweed, and yellow star thistle. Methods of controlling would be proposed and subjected to site-specific environmental analyses. Control methods

would not be considered unless the weeds are confined to the BLM lands or efforts are coordinated with adjoining infested, non-BLM lands. Proper grazing management will be emphasized after control to minimize possible reinfestation of weeds from neighboring lands.

Utility and Transportation Corridors

All public land will be available and open for utility and transportation corridor development except the Hot Lakes RNA/ACEC, the Brewster Bald Eagle Roost and Juniper Forest ACECs, the Chopaka Mountain WSA, and the Juniper Dunes Wilderness Area as shown on Maps 4 and 5. Corridors have been identified and designated on BLM lands in Washington (see Map 2). Corridor widths vary but are minimum of 200 feet. Additional corridors will be considered on a case-by-case basis. Applicants will be encouraged to locate new facilities within existing corridors to the extent possible.

The remaining ACECs will be designated as avoidance areas. Rights-of-way in those ACECs will only be permitted after all other alternative routes have been analyzed or if the corridor's development would not produce irreversible impacts to the resources being protected by the designations. All proposals identified by the Western Utility Group have been reviewed.

Withdrawal Review

BLM policy is to minimize the acreage of public land withdrawn from mining and mineral leasing and to replace existing withdrawals with rights-of-way, leases, permits, or cooperative agreements, where applicable, over the next six years. Approximately 140,000 acres of land administered by other federal agencies will be reviewed by BLM. This review of other agency withdrawals will be completed by 1991.

If the withdrawal review process determines that a withdrawal is no longer needed, or should be modified, BLM will recommend that the withdrawal be revoked or modified in whole or in part. Upon revocation, part or all of the lands may revert to BLM management. Reverted lands will be managed in accordance with this RMP. No new BLM withdrawals are proposed. New withdrawal requests by other agencies will be evaluated on a case-by-case basis weighing the agencies' and public's needs with the RMP.

Trespass Abatement

Unauthorized uses of public land will be resolved either through termination, authorization by lease or permit, or sale. Decisions will be based on (1) the type and significance of improvements involved; (2) conflicts with other existing or potential resource values and uses; and (3) unauthorized use being intentional or unintentional.

Unauthorized use will generally be terminated immediately. However, because of the various statutes of limitation which require that suit be brought within a certain period of time, it is necessary to process trespass cases by priorities. Criminal cases are to be processed ahead of civil cases, and cases of higher values ahead of ones of lower values. With this in mind, normal priorities are:

- A. Current ongoing trespasses.
- B. Cases less than one-year old.
- C. Cases over three years of age in which prospects for settlement are good.
- D. Cases between one and three years old.
- E. Continuing unauthorized use which has been occurring over long periods (Occupancy).

Temporary permits may be issued to provide short-term authorization, unless the situation warrants immediate abatement and restoration of the land. It is Bureau policy to collect trespass damages for the entire unauthorized use period.

Fire Management

The Spokane District will continue fire suppression activities. Fire management plans for the management areas will be prepared. These plans will identify the levels of suppression, necessary to meet fire management objectives. They will take into consideration resource values, public concern and safety, private, and/or public impacts, and intermingled landownership at the activity planning level. Prescribed fire planning will be coordinated with adjacent landowners. Fire management standard operating procedures are summarized in Appendix C. Fire suppression and management history are summarized in Appendix E.

Mineral Resources

The BLM exclusively manages 307,523 acres and mineral estate, and 706,285 acres (all) of reserved Federal mineral estate in Washington. The BLM also has responsibilities on approximately 2.3 million acres of Indian lands in eastern Washington, and approximately 11.1 million acres of other Federal lands such as those lands managed by the Bureau of Reclamation, Department of Defense, Atomic Energy Commission, and U.S. Forest Service.

Other federal agencies administer the surface resources on the remaining lands. Withdrawals or restrictions on mineral development of these lands depend on legislation, the mission of the agency, and each agency's recommendations to the Bureau. The Bureau periodically reviews withdrawals and participates in development of other agency land management plans (e.g., U.S. Forest Service) and, where appropriate, seeks to ensure that the public lands remain open and available for mineral

exploration and development. Acquired lands are technically available for leasing, but the Bureau can only lease these lands if the surface management agency consents.

BLM's responsibilities vary considerably when other agencies are involved, depending mainly on whether or not the lands are open to mineral entry and the type of minerals involved. For example, if the lands are open to leasing, the BLM is responsible for inspection and enforcement activities on oil and gas drilling operations. BLM also works with the surface agency prior to issuing permits for such operations. If the lands are closed to mineral entry (e.g., National Park Service), the only operations allowed may be those which predated the withdrawal. BLM's role on these lands is limited to record keeping, adjudication of new applications, and some involvement on the few older operations which exist.

Leasable Minerals

Leasable minerals will continue to be made available on most of the land where the BLM manages the surface and mineral estate. No changes will be made in existing leases, although impacts on other resources will be considered in operating plans. New restrictions or changes in lease stipulations will apply prior to reissuing leases and to areas not presently leased.

Areas closed to mineral leasing after expiration of existing leases include the 7,140 acre Juniper Dunes Wilderness Area and the 80 acres of public lands within the Hot Lakes Research Natural Area ACEC.

About 287,225 acres of public land will be open to exploration, subject to standard lease requirements and stipulations. Note the standard operating procedures in Appendix C.

A restrictive no surface occupancy (NSO) stipulation for fluid minerals exploration and development will be maintained on 13,158 acres of public lands in the planning area. These lands include the Chopaka Mountain Wilderness Study Area, the Yakima and Columbia River Islands ACEC, and Webber Canyon ACEC (See Table 2-10). Exceptions to the NSO may be allowed. When leases are issued with the NSO, the following criteria for exception will be included in the stipulation:

- (1) Evidence of exploration or development activities would be substantially unnoticeable after reclamation has been completed.
- (2) All activities involving exploration would use existing roads to the fullest extent possible.
- (3) Any proposed exploratory drilling pad or road construction for access to a drilling site would be located to avoid canyon slopes and areas of high visibility. In these areas, roads and drilling sites would

be fully rehabilitated and restored as nearly as possible to original contours.

Implementation

Locatable Minerals

Areas not specifically withdrawn from mineral entry will continue to be open under the mining laws to help meet the demand for minerals. Mineral exploration and development on public land will be regulated under 43 CFR 3809 to prevent unnecessary and undue land degradation. Note the standard operating procedures in Appendix C. No new mineral withdrawals are proposed in this plan. The Bureau will recommend that the existing protective withdrawals on the Hot Lakes RNA and the Juniper Dunes Wilderness Area be retained.

Salable Minerals

Salable minerals, including common varieties of sand, gravel, and stone, will continue to be made available for local governments and the general public. The salable mineral program involves numerous pits and quarries where State and County road departments obtain rock for road surfacing material. Over the previous ten years approximately 1.9 million cubic yards of material have been removed from 21 sites in eastern Washington for these purposes. New material sites may be developed as needed if they are consistent with the protection of other resource values.

All public lands are available for recreational mineral collection unless specific minerals are subject to prior rights, such as mining claims. No areas are withdrawn from the mining laws as recreational mineral collecting sites.

Reserved Federal Mineral Estate

The reserved Federal mineral estate will continue to be available for mineral development to the extent allowed by the laws and regulations governing the particular reservations. Standard stipulations and procedures will apply for mineral leasing operations.

Section 209(a) of FLPMA requires that the United States retain ownership of the mineral estate in most cases. Where the surface is or will be in non-Federal ownership, the mineral interest owned by the United States may be conveyed to the surface owner in accordance with Section 209(b) of FLPMA if:

- (1) There are no known mineral values in the land, or
- (2) The reservation of the mineral rights in the United States is interfering with or precluding appropriate non-mineral development of the land where such development is a more beneficial use of the land than mineral development.

All land tenure adjustments will consider the effect on the mineral estate. Few lands are expected to meet the criteria for disposal of mineral estate.

Table 2-10 Mineral Leasing Direction Under the Plan

Public Land Open to Development with Standard Stipulations	287,225	29%
Open to Development with Restrictive Stipulations*	13,158	1.3%
Closed to Leasing/or Will Be Closed to Leasing Upon Termination of Current Leases	7,220	0.7%
Reserved Federal Mineral Estate		
Open to Leasing With Standard Stipulations	706,285	70%
Totals	1,013,888	100%

(Restrictions or changes in lease stipulations would apply only to areas not presently leased or areas presently leased where leases are renewed.)

Appendix A Cooperative Agreement Summary

Cistern Maintenance	05-24-67	NA	NA	Water Imp. and Cover Plantings	Rattlesnake Hills near Yakima
Colockum	12-23-67	1,282.07	21,120.00	Game Range	T. 19 N., R. 22 E.
	07-12-67	1,935.15	17,920.00	Game Range	T. 17 N., R. 21 E.
	03-18-68				T. 19 N., R. 22 E.
Entiat	11-18-66	2,386.00	2,040.00	Game Range	T. 18 N., R. 21 E.
					T. 25 N., R. 20 E.
					T. 25 N., R. 21 E.
					T. 26 N., R. 20 E.
					T. 26 N., R. 21 E.
Klickitat	12-11-64	2,232.64	7,612.36	Game Range	T. 3 N., R. 13 E.
					T. 4 N., R. 14 E.
					T. 5 N., R. 14 E.
					T. 6 N., R. 14 E.
Morning Dove Shooting Area	12-11-64	194.35		Dove Shooting	T. 12 N., R. 20 E.
Methow	01-29-73	80.00	11,669.00	Game Range	Moxee, WA
Yakima River	12-11-64	4,162.16	99,299.00	See (a), (b)	T. 34 N., R. 22 E.
	10-16-67			(c), (d) below	T. 14 N., R. 19 E.
	02-02-72				T. 15 N., R. 19 E.
(a) Roza Site		Incl. in Total		Fishing Recreation	T. 15 N., R. 19 E.
(b) Umtanum Site		Incl. in Total		Fishing Recreation	T. 16 N., R. 19 E.
(c) Squaw Cr. Site		Incl. in Total		Fishing Recreation	T. 15 N., R. 19 E.
(d) Amendment for L. T. Murray		Incl. in Total		Game Range	T. 14 N., R. 19 E.
Swakane	04-15-68	1,046.46	8,947.00	Game Range	T. 15 N., R. 19 E.
					T. 23 N., R. 20 E.
					T. 24 N., R. 20 E.
Yakima Feeding Areas	02-02-72	719.76	79,521.00	Winter feed sites for Big Game	T. 24 N., R. 21 E.
				Wildlife	T. 12 N., R. 16 E.
				Rec. Areas	T. 12 N., R. 17 E.
Chelan Butte and Gallagher Flats	02-11-72	2,398.88	7,080.00		T. 15 N., R. 17 E.
					T. 26 N., R. 22 E.
					T. 27 N., R. 22 E.
Quincy and Crab Creek	03-27-72	858.40	33,967.00	Wildlife Rec. Areas	T. 27 N., R. 23 E.
					T. 19 N., R. 22 E.
					T. 19 N., R. 23 E.
					T. 20 N., R. 23 E.
					T. 15 N., R. 23 E.

Appendix B Land Tenure Adjustment Criteria for Retention or Disposal

Criteria that will be used in categorizing this public land for either retention or disposal, as well as identifying acquisition opportunities and priorities, are summarized below. This list is not considered all-inclusive, but it represents the major factors that will be evaluated. The criteria that will be used include the following:

- public resource values that will benefit and enhance the range management, wildlife habitat, watershed, recreation, forestry, mineral, cultural resource, endangered, threatened, or sensitive plant and animal, and wilderness programs;
- legal as well as physical accessibility of the land for public use;
- amount of public monetary investments in facilities or improvements on the public land and the potential for recovering those investments;
- difficulty or costs in time and money in the effective managerial administration of the lands;
- suitability or desirability of the land for management by another governmental agency;
- significance of any subsequent land use decisions in stabilizing, enhancing, or hindering existing or potential businesses, social and economic conditions, and/or life-styles;
- need for future mineral development;
- encumbrances to the land, including, but not limited to, Recreation and Public Purposes and small tract leases and/or other leases and permits, rights-of-way, and withdrawals;
- consistency of the decision with cooperative agreements and plans or policies of other agencies;
- suitability and need for change in landownership or use for purposes including, but not limited to, community expansion or economic development, such as residential, commercial, industrial, or agricultural (other than grazing) development; and
- state and local governmental requests and recommendations for retention or disposal of BLM administered public land.

Disposal of lands will be under the applicable authorities and in the following order of preference:

1. State Lieu and State Grant selections,
2. State Exchanges,

3. Private Exchanges,

4. Recreation and Public Purpose patents,

5. BLM/U.S. Forest Service jurisdictional transfers (These are minor jurisdictional transfers usually involving limited acreages; it does not refer to the proposed BLM/Forest Service Interchange that is presently under consideration.),

6. Withdrawals to other federal agencies,

7. Public sales,

8. Indian allotments, or

9. Desert land entries (subject to the Food Securities Act of 1985).

Public lands which meet land sales disposal criteria in the Planning Area

Legal Description:

Township	Range	Section	Subdivision
26 N.	20 E.	29	Lot 8
7 N.	21 E.	10	Lot 1
7 N.	21 E.	12	Lots 9 & 10
28 N.	21 E.	14	W1/2SE1/4
8 N.	22 E.	10	Lot 1
8 N.	22 E.	28	Lot 2, NW1/4SW1/4
21 N.	22 E.	8	Lot 1
28 N.	22 E.	19	Lot 3
28 N.	22 E.	23	SE1/4SE1/4
28 N.	22 E.	26	NE1/4SW1/4
32 N.	22 E.	17	SE1/4SW1/4
26 N.	23 E.	5	SE1/4NW1/4, SW1/4NE1/4
27 N.	23 E.	9	Lot 10
27 N.	23 E.	33	NW1/4NE1/4
26 N.	25 E.	17	E1/2NW1/4
33 N.	25 E.	1	Lots 3 & 4
10 N.	26 E.	26	E1/2SE1/4
9 N.	27 E.	8	Lot 1
10 N.	27 E.	34	SW1/4NW1/4
9 N.	28 E.	6	Lot 12
9 N.	28 E.	6	Lot 18
9 N.	28 E.	6	Lot 77
9 N.	28 E.	6	Lot 83
9 N.	28 E.	6	Lot 107
9 N.	28 E.	6	Lot 137
9 N.	28 E.	6	Lot 141
9 N.	28 E.	6	Lot 145
9 N.	28 E.	6	Lot 146
9 N.	28 E.	6	Lot 152
9 N.	28 E.	6	Lot 155
9 N.	28 E.	6	Lot 163
9 N.	28 E.	6	Lot 173
9 N.	28 E.	6	Lot 174
9 N.	28 E.	6	Lot 178
9 N.	28 E.	6	Lot 180
9 N.	28 E.	6	Lot 181
9 N.	28 E.	6	Lot 202
9 N.	28 E.	6	Lot 223
9 N.	28 E.	8	Lot 86
9 N.	28 E.	8	Lot 140
9 N.	28 E.	8	Lot 168
9 N.	28 E.	8	Lot 183
9 N.	28 E.	8	Lot 185
9 N.	28 E.	8	Lot 187
9 N.	28 E.	8	Lot 199
9 N.	28 E.	8	Lot 215
9 N.	28 E.	8	Lot 217
9 N.	28 E.	18	Lot 3
28 N.	28 E.	20	SW1/4NE1/4, SE1/4NW1/4
6 N.	29 E.	18	N1/2NE1/4
8 N.	30 E.	32	SE1/4NE1/4
7 N.	31 E.	1	Lot 1
9 N.	31 E.	20	NE1/4SW1/4, N1/2SE1/4
9 N.	31 E.	22	NW1/4NE1/4, N1/2NW1/4
39 N.	33 E.	12	Lot 6
14 N.	35 E.	12	NW1/4SW1/4

Appendix C

Standard Design Features and Operations Procedures

Standard Design Features

Introduction

The following list of standard design features includes project design features, reclamation measures, and procedures that could be applied as stipulations or requirements on proposed projects at the discretion of the authorized officer. The standard design practices will be used as mitigation measures throughout the planning area to avoid or reduce undesirable impacts. Because it is not possible to anticipate every kind of project that might be proposed, other practices not listed below might also be applied to particular projects.

Range Developments (General)

The following is a discussion of typical design features and construction practices for range improvements and treatments proposed in this plan (See Table 2-7 for Range Improvements by Allotment). There are many special design features that can be made part of a project's design which are not specifically discussed in this Appendix. One example of a special design feature would be the use of a specific color of fence post to blend with the surrounding environment, thereby mitigating some of the visual impact of the fence. These mitigating design features will be developed, if needed, for individual projects at the time an environmental analysis is completed.

Structural Improvements

Fences

Fences would be constructed to provide exterior allotment boundaries, divide allotments into pastures, protect streams and riparian zones, and control livestock. Most fences would be three or four wire and steel posts with intermediate wire stays. Existing fences that create wildlife movement problems would be modified. Proposed fence lines would not be bladed or scraped. Gates or cattleguards (gates with cattleguards) would be installed where fences cross existing roads. For any fences in wildlife migration areas, the need for let down fences to allow passage of wildlife would be analyzed. These fences would be let down when livestock are not present.

Water Impoundments

Reservoirs, including dugouts and waterholes, and catchments would be constructed with earth moving machinery. The essential steps in constructing a dam for a reservoir are the excavation of a keyway, backfilling a core of non-permeable material and

placing other fill to a prescribed height and slope. Generally, all fill material is excavated on-site. Dugouts are very small reservoirs whose dams do not have a keyway and core. Depending upon feasibility, some reservoirs with a fill of over 15 feet would be fenced and water piped to a trough or waterhole. Waterholes are excavated holes in non-permeable material with the soil placed adjacent to the hole. Catchments are rainfall catching projects consisting of a fenced watershed apron and an impermeable waterhole, bag, tank, or trough. Catchments may have large aprons for livestock or very small ones for wildlife gazzers.

Spring Development

Springs would be developed or redeveloped using a backhoe to install a buried collection system, usually consisting of drain tile or perforated pipe and a collection box. A short pipeline could be installed to deliver water to a trough for use by livestock and wildlife. Ramps, rocks, or floatboards would be provided in all water troughs for small birds and mammals to gain access to and/or escape from the water. Normally the spring area and the overflow are fenced to exclude livestock following development.

New spring developments and new reservoirs would cause a permanent decrease in upland key species composition on 5 to 10 acres surrounding the new water source due to heavy utilization and trampling by livestock concentrating in the area. As springs are developed, water would be diverted to livestock water troughs, and fencing would protect riparian vegetation where significant overflow occurs. Consequently, a new increase would occur over the long-term in both woody and herbaceous riparian key species at springs.

Pipelines

Wherever possible, water pipelines would be buried. Most pipelines would have water troughs and sometimes storage tanks.

Wells

Well sites would be selected based on geologic reports that predict the depth to reliable aquifers. All applicable State laws and regulations that apply to the development of ground water would be observed.

Nonstructural Improvements

Vegetation Manipulation

Vegetation manipulation (brush control and brush control with seeding) is proposed primarily in portions of the big sagebrush vegetation type where significant improvement in the range condition rating would require more than 15 years using grazing management alone.

Vegetation manipulation projects would be designed using irregular patterns, untreated patches, and so forth, to provide for optimum edge effect for visual and wildlife considerations. Layout and design would

be coordinated with Washington State Department of Game biologists.

Brush Control

The proposed methods of brush control are burning, brushbeating, or plowing of big sagebrush outside of important deer wintering areas. Burning would temporarily reduce big sagebrush because big sagebrush does not resprout following fire. The effect of burning on perennial bunchgrasses varies with the intensity of the fire, season of the burn, and the species of grass in the burn area. The composition of Sandberg's bluegrass, bluebunch wheatgrass, and cheatgrass, where present, would increase on areas proposed for burning. Several studies in Idaho indicate that fall burning does not harm most perennial herbaceous species (Britton 1978). Sites with Idaho fescue or bitterbrush would not be burned since these species are easily damaged by fire.

Seeding

Seeding would be accomplished by use of the rangeland drill in most cases. Broadcast seeding would occur on small disturbed areas, rough terrain, and rocky areas. Preparation for seeding (brush and cheatgrass control) would be by burning or mechanical treatment. Based on observations of existing seedings in the RMP area and studies of similar areas in Oregon and Washington, crested wheatgrass would comprise 50 to 90 % of the seeded area. Species composition following any treatment would vary according to the success of the brush and cheatgrass control, the survival of other species in the seed mixture, and the amount of precipitation in the year following seeding.

It is anticipated that the existing road and trail system would provide access for range improvement construction.

It is assumed that normal maintenance such as replacement of pipeline sections, fence posts, and retreatment of vegetation manipulations would occur.

Standard Operating Procedures

The following procedures would be followed in the construction of all management facilities and for vegetation manipulations.

1. Specific proposed projects and alternatives to the proposed actions would be evaluated individually through the environmental analysis process to determine whether they would have significant adverse environmental impacts.

2. To comply with the National Historic Preservation Act of 1966, 36 CFR 800, and Executive Order 11593, all areas where ground is to be disturbed by range developments would be inventoried for prehistoric and historic features. Where feasible, all sites found by this inventory would be avoided.

If sites are found to be eligible for the national register and cannot be avoided, a determination of the effect of the project on the site(s), including appropriate mitigating measures if necessary, would be done in consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation. No action affecting the site would be taken until the Advisory Council and SHPO have had the opportunity to make comments.

If buried cultural remains are encountered during construction, the operator must discontinue construction until the BLM evaluates the discovery and determines the appropriate action.

3. No action would be taken by the BLM that could jeopardize the continued existence of any Federally listed threatened or endangered plant or animal species. An endangered species clearance with the U.S. Fish and Wildlife Service (FWS) would be achieved before any part of the Preferred Alternative or other alternatives would be implemented that could affect an endangered species or its habitat.

In situations where data are insufficient to make an assessment of proposed actions, surveys of potential habitats would be made before a decision is made to take any action that could affect threatened or endangered species. Should the BLM determine that there could be an effect on a Federally listed species, formal consultation with the FWS would be initiated. In the interim period before formal consultation, the BLM would not take any action that would make an irreversible or irretrievable commitment of resources that would foreclose the consideration of modifications or alternatives to the proposed action.

When the FWS opinion is received, if it should indicate the action would be likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat, the action would be abandoned or altered as necessary.

The BLM also would comply with any State laws applying to animal or plant species identified by the State as being threatened or endangered (in addition to the Federally listed species).

4. All actions would be consistent with the BLM's Visual Resource Management criteria. The management criteria for the specific visual class would be followed. (See Visual Resource Management this Appendix.)

5. In crucial wildlife habitat (winter ranges, fawning/calving areas, strutting grounds, and the like), construction work on projects would be scheduled during seasons when the animals are not concentrated to avoid or minimize disturbances.

6. Surface disturbance at all project sites would be held to a minimum. Disturbed soil would be rehabilitated to blend into the surrounding soil surface

and reseeded as needed with a mixture of grasses, forbs, and browse as applicable to replace ground cover and reduce soil loss from wind and water erosion.

7. Analysis of cost effectiveness would be done on an Allotment Management Plan (AMP) basis prior to the installation of any management facility or land treatment.

8. Generally all areas where vegetative manipulations occur would be totally rested from grazing during at least two growing seasons following treatment.

9. All land treatment projects on crucial wildlife ranges would be limited in size, where appropriate, by the cover requirements of wildlife.

Minerals

General

No "unnecessary or undue degradation" of federal lands will be allowed. "Unnecessary or undue degradation" means surface disturbance greater than what would normally result when activity is being accomplished by a prudent operator in usual, customary, and proficient operations of similar character and taking into consideration the effects of operations on other resources and land uses, outside the area of operations. Failure to initiate and complete reasonable mitigation measures, including reclamation of disturbed areas or creation of a nuisance may constitute unnecessary or undue degradation. Failure to comply with applicable environmental protection statutes and regulations thereunder will constitute unnecessary or undue degradation.

Locatable Mineral Development Under the Mining Laws (43 CFR 3809 and 3802)

All Operations

1. All operations, whether casual, under a notice, or by a plan of operations, shall be reclaimed.

2. All operations, including casual use and operations under either a notice or a plan of operations, shall be conducted to prevent unnecessary or undue degradation of the federal lands and shall comply with all pertinent federal and state laws, including but not limited to the following:

a. Air Quality. All operators shall comply with applicable standards, including the Clean Air Act (42 U.S.C. 1857 et seq.).

b. Water Quality. All operators shall comply with applicable federal and state water quality standards, including the Federal and State Water Pollution Control Act, as amended (30 U.S.C. 1151 et seq.).

c. Solid Wastes. All operators shall comply with applicable federal and state standards for the disposal of solid wastes, including regulations issued pursuant to the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.). All garbage, refuse, or waste shall either be removed from the affected lands or disposed of or treated to minimize, so far as is practicable, its impact on the lands.

d. Fisheries, Wildlife, and Plant Habitat. The operator shall take such action as may be needed to prevent adverse impacts to threatened or endangered species and their habitat which may be affected by operations.

e. Cultural and Paleontological Resources. Operators shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains of any historical or archaeological site, structure, building, or object on federal lands.

Operators shall immediately bring to the attention of the authorized officer any cultural and/or paleontological resources that might be altered or destroyed on federal lands by his/her operations and shall leave such discovery intact until told to proceed by the authorized officer. The authorized officer shall evaluate the discoveries brought to his/her attention, take action to protect or remove the resource, and allow operations to proceed within 10 working days after notification to the authorized officer of such discovery.

The federal government shall have the responsibility and bear the cost of investigations and salvage of cultural and paleontology values discovered after a plan of operations has been approved, or where a plan is not involved.

3. Maintenance and Public Safety. During all operations, the operator shall maintain his structures, equipment, and other facilities in a safe and orderly manner. Hazardous sites or conditions resulting from operations shall be marked by signs, fenced, or otherwise identified to alert the public in accordance with applicable federal and state laws and regulations.

4. Applicability of State Law. Nothing shall be construed to effect a preemption of state laws and regulations relating to the conduct of operations or reclamation on federal lands under the mining laws.

Notice of Operations, 5 Acres or Less

The following standards govern activities conducted under a notice:

1. Access routes shall be planned for only the minimum width needed for operations and shall follow natural contour, where practicable, to minimize cut and fill.

2. All tailings, dumps, deleterious materials or substances, and other waste produced by the operations shall be disposed of so as to prevent unnecessary or undue degradation in accordance with applicable federal and state Laws.

3. At the earliest feasible time, the operator shall reclaim the area disturbed, except to the extent necessary to preserve evidence of mineralization, by taking reasonable measures to prevent or control on-site and off-site damage to the federal lands.

4. Reclamation shall include, but shall not be limited to:

- a. Saving of topsoil for final application after reshaping of disturbed areas has been completed;
- b. Measures to control erosion, landslides, and water runoff;
- c. Measures to isolate, remove, or control toxic materials;
- d. Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and

3. Rehabilitation of fisheries and wildlife habitat.

Plan of Operations-Prevention of Unnecessary or Undue Degradation

1. When an operator files a plan of operations of a significant modification, which encompasses land not previously covered by an approved plan, the authorized officer shall make an environmental assessment or a supplement thereto to identify the impacts of the proposed operations on the lands and to determine whether an environmental impact statement is required.

2. In conjunction with the operator, the authorized officer shall use the environmental assessment to determine the adequacy of mitigating measures and reclamation procedures included in the plan to insure the prevention of unnecessary or undue degradation of land. If an operator advises he/she is unable to prepare mitigating measures, the authorized officer, in conjunction with the operator, shall use the environmental assessment as a basis for assisting the operator in developing such measures.

3. If, as a result of the environmental assessment, the authorized officer determines that there is "substantial public interest" in the plan, the authorized officer shall notify the operator, in writing, that an additional period of time, not to exceed the additional 60 days provided for approval of a plan, is required to consider public comments on the environmental assessment.

Oil and Gas Leasing

Standard Stipulations

Standard stipulations are listed in Sec. 6 of Offer to Lease and Lease for Oil and Gas Form 3100-11. They are:

Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee shall take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee.

Prior to disturbing the surface of the leased lands, lessee shall contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short-term special studies under guidelines provided by lessor. If in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects.

Special Stipulations

Special stipulations are attached to oil and gas leases to provide additional protection for fragile areas or critical resource values. Examples of special stipulations are seasonal restrictions for critical wildlife habitat and No Surface Occupancy to protect special values or fragile areas.

Timber Harvest

Sale Planning

Timber. Planning for a timber sale must precede actual field layout of the sale. General needs and goals for a particular area are established years in advance through the five-year timber sale plan. Such plans are more sharply focused as certain tracts are selected for inclusion in short-range plans such as annual timber sale plan. Environmental assessments (EA) are prepared for specific sale areas. Once an area has been selected and approved for inclusion in the annual sale plan, the field forester, with the aid of resource specialists, makes adjustments as necessary to best meet the stated plans and

objectives and environmental protection requirements. Planning and preparation for all sales shall consider long-range and short-range planning. Prior to field layout of a proposed sale, the Area Manager reviews, with the foresters assigned to the sale layout task, the following:

- a. Five-year timber sale plan.
 - b. Management plans for special use areas and other activities, e.g., HMPS.
 - c. Annual timber sale plan including EA for proposed action.
 - d. Road transportation plan for area, including planned design standards.
 - e. Public access plan for area and current status of access.
 - f. Terms and conditions of right-of-way agreements and easements for area involved.
 - g. Condition and status of cadastral surveys in area.
 - h. Status of inventories for or occurrence of sensitive, threatened, or endangered plants and animals; status of inventories of cultural resources.
 - i. Notification requirements of Corps of Engineers under Sec. 404 of Federal Water Pollution Control Act if work involves discharge of dredged or fill material in navigable waters; applicability of any general permit issued pursuant to Sec. 404.
 - j. Applicability of shoreline/coastal zone management programs pursuant to the Shoreline Management Act of 1971 as amended.
2. Silvicultural Practices. Silvicultural practices must be used that best meet the management goals and related land-use prescriptions and assure prompt regeneration of the forest. Selection cutting, shelterwood cutting, clearcutting or their various modifications are available options.
- a. Clearcutting would not be used as a cutting practice (unless approved as a result of a natural disaster):
- (1) Soil slope or other watershed conditions are fragile and subject to unacceptable damage.
 - (2) There is no assurance that the area can be adequately restocked within 15 years after harvest.
 - (3) Aesthetic values outweigh other considerations.
- b. Clearcutting would be used only where:
- (1) It is silviculturally essential to accomplish the relevant forest management objectives.

(2) The size of clearcut blocks, patches, or strips are kept at the minimum necessary to accomplish silvicultural and other multiple-use management objectives. Cutting units would not exceed 40 acres in normal circumstances. More than 40 acres may be appropriate for salvage of an area already environmentally damaged by fire, insect, or wind, or where larger cutting units would minimize road where larger cutting units would minimize road construction and other actions which would result in greater adverse environmental impact on the total forest.

3. Sale Design. Cutting areas should be shaped and designed to blend as much as possible with the natural terrain and landscape.

4. Roads. Roads and other facilities would be kept to a minimum and, where needed to fulfill short- and long-term management needs, would be located, designed, and constructed to the standards necessary for the total land use and resource values involved.

a. Location of Logging Roads. Roads would be so located to minimize the risk of material entering adjacent streams or other waters.

(1) Roads will be located on stable terrain such as moderate sideslopes or ridgetops whenever possible. When roads must cross potential unstable terrain, the road would be engineered to the extent necessary to prevent unacceptable damage. Where sidesteading of waste material during road excavation will cover the downslope soil with rock and subsoil incapable of supporting productive vegetation, consider end-hauling waste material to stable areas of more moderate topography.

(2) Logging roads will be located away from wet or marshy areas and other wetlands, meadows, riparian areas, and streambanks. Otherwise, necessary drainage and streambank protection would be provided.

(3) The number of stream crossings would be minimized. When it is practical, streams would be crossed at right angles to the main channel.

(4) Areas of vegetation would be left or established between roads and streams.

b. Road Design. Consistent with good safety practices and intended use, each road will be designed to the minimum-use standards adapted to the terrain and soil materials so as to minimize surface disturbance and damage to water quality.

(1) A flexible design will be to minimize damage to soil and water quality.

(2) Roads will be designed no wider than necessary to accommodate the immediate anticipated use.

(3) Culvert out-flow would not be allowed to be discharged onto unprotected fill slopes. Energy dissipaters would be installed at culvert outlets or in half rounds where needed.

(4) Where applicable, water crossing structures would be designed to provide for adequate fish passage, minimum impact on water quality, and the 25-year frequency storm. Increases in water yield and peak flows resulting from vegetation removal would be kept in mind when designing structures.

(5) Roads will be designed to drain naturally by out-sloping and by grade changes wherever possible. Where out-sloping is not feasible, use roadside ditches and culverts to drain roads onto undisturbed ground.

(6) Dips, waterbars, and cross-drainage would be provided on all temporary roads.

(7) Drainage diversions would be placed above stream crossing so that water may be filtered through vegetative buffers before entering the stream.

(8) Drainage would be provided where ground causes slope instability.

c. Road Construction. Road construction represents a principal source of sedimentation. Limit excavation to the practical, essential amount needed to meet the necessary road standards. Plan for stabilization of soil exposed and for rehabilitation of other environmental damage during construction.

Harvest Techniques. Sale layout planning will include planning for use of harvest systems that minimize damage to the site and to reserve trees and provide maximum protection from fire, insects, disease, wind, rodents, and other hazards.

a. Felling. Directional felling systems would be used where needed to minimize site damage; to protect streams, buffer strips, riparian areas, cultural sites, or reserved timber (including wildlife trees); or to increase timber utilization.

b. Landings. Landings will be of minimum size commensurate with safety an equipment requirements and located on stable areas so as to minimize the risk of material entering adjacent streams and waters. Landings should be located on firm ground above the high-water level of any stream. Landing locations on unstable areas, on steep side hill areas, or areas which require excessive excavation should be avoided.

Soil Protection. Preserving the upper soil strata for the subsequent growing of future forest crops depends in large part on the care, planning, and professional judgement exercised in sale layout. No more than 12 percent of the area would be allowed to become compacted.

a. Protection of Watershed. Each sale will be planned to reduce to a minimum the amount of soil erosion resulting from road construction, logging, or slash disposal commensurate with practical logging procedures and reasonable costs.

b. Revegetation. Prompt planning will be undertaken for revegetation of roadway cut and fill slopes and other areas where soil has been seriously disturbed and constitutes an erosion and sedimentation hazard. Revegetation and erosion prevention measures may include mulching, seeding to grass or legumes or forbs, planting of rapid-growth species of plants, seeding or planting of trees, hydromulching, and other appropriate soil stabilization practices.

Protection of streams, wetlands-riparian areas, and other waters. When planning operations along streams, lakes, bogs, swamps, marshes, wet meadows, springs, seeps, or other sources where the continuous presence of water is indicated, protect soil and vegetation from disturbances that could cause adverse effects on water quality and water quantity, wildlife and aquatic habitat. Special consideration will be given around sources that supply domestic water. Use streamside buffer strips along perennial and intermittent streams to reduce the quantity of sediment a logging wastes that might reach the stream, to help prevent stream water temperature increases, and to protect aquatic life, riparian zones, and natural streamside beauty. Review decisions concerning management of riparian areas and wetlands made during the planning process regarding management objectives, vegetative composition, planned management actions, etc. If guidelines for marking buffer strips are not listed in the planning documents, the following guidelines should be observed:

a. Leave all hardwood trees critical to stream protection and shrubs, grasses, rocks, and natural "down" timber which afford shade over a perennial stream or maintain streambank protection. Where insufficient non-merchantable tree species exist to provide up to a minimum 75% of original shade over the stream, a fringe of undisturbed merchantable trees may be required. These trees are also the future source of large woody debris for the stream and riparian areas.

b. All natural-occurring, large woody debris and tree boles should be left in the stream to provide habitat structure, unless blocking migrations of fish or recommended for removal by a hydrologist or biologist.

c. Neither an optimum nor a minimum width can be arbitrarily established for buffer strips. The necessary width varies with steepness of the terrain, the nature of the undercover, the kind of soil, the size of the stream, the width of the riparian area, and the amount of timber that is to be removed.

d. For effective filtering of sediment, buffer strips should be wide enough to entrap the material that erodes from upslope road construction or from adjacent logging areas. Under some conditions, and with careful control in adjacent logging areas, a relatively narrow buffer strip may suffice. On the other hand, where excessive soil movement may occur, the buffer strip may have to be much wider and other precautions will have to be taken to eliminate adverse effects on the stream water quality.

e. A modification of the buffer strip plan may involve removal of some merchantable trees from buffer strips as decided by an interdisciplinary team during sale planning. Buffer strips may be protected by leaving stumps high enough to prevent upslope trees from rolling or sliding through the strips into the streams, by parallel felling, or by tree pulling or jacking.

f. Where timber should be removed because it would be subject to excessive windthrow and where it is difficult to leave an adequate buffer of timber to shade and protect the stream, plan to reestablish cover along the stream after cutting is completed. Fast growing deciduous species or other suitable vegetation may be required to restore shade as quickly as possible. Leave understory vegetation as undisturbed as possible to filter runoff and help stabilize the soil.

Wildlife Considerations. Special care will be taken during sale layout planning to protect or preserve important wildlife and aquatic habitat. Identified crucial habitats may include big game winter ranges, migration routes, calving ground, strutting ground, nesting areas, and riparian zones. However, certain habitat considerations must be a part of every sale layout plan.

a. **Legislated Action.** Positive action will be taken to preserve sensitive threatened or endangered species and their habitat, in accordance with the mandates of the Endangered Species Act of 1940, Sikes Act 1960, and existing Bureau policy.

b. **Wildlife Tree (Snag) Management.** Evenly distributed management will be provided for cavity dwellers on managed forest lands without creating logging safety hazards and without violating the decisions on which the allowable cut plan is based. Maximum use would be made of existing withdrawals to manage snags. These areas can be managed to contribute to the snag requirement while recently cut units may contain few or no snags. To meet the snag policy, wildlife trees/snags will be retained, as feasible, on each acre of managed forest land. Snag management in areas that are devoid of snags, or have limited existing snags, may require that an adequate number of green trees or culls be left per acre to maintain a viable population level of cavity dependent wildlife.

Specific wildlife tree/snag diameters (DBH) to be retained will be based on wildlife species requirements. When snag management is not directed at specific species habitat requirements, then wildlife tree/snag diameter selection would be divided approximately equally between snags 25 inch DBH and larger ranging to 50 feet in height and snags 10-25 inches DBH over 6 feet in height. In all cases leave all the soft snags and the largest available hard snags when a choice exists. In selecting wildlife trees, give special attention to snags and culls exhibiting heart rot, broken tops, external fungal conks, dead branch stubs, and signs of existing wildlife use.

c. **Down Log Management.** Provide at least 5 to 10 down logs per acre on lands in the intensive forest base. Each log should have a minimum dimension of 12"-17" x 20". Meeting this goal should not be difficult under normal circumstances because clearcut units usually contain more material meeting the size requirements.

d. **Opening (Forages)/Cover Ratio.** Evaluate the opening (forage) and cover ratio in a proposed timber sale area when the sale involves big game habitat. Consult a wildlife biologist to determine how to obtain maximum benefits of timber harvest on the maintenance of optimum forage/cover ratios on deer and elk summer and winter ranges.

e. **Access.** The effect of accessibility and human disturbance on wildlife will be considered in road location and design. Closure of unneeded roads would take place upon completion of logging, and, if necessary, seasonal closures of operations would take place during critical wildlife periods. The cumulative effects of the road transportation network will be considered on key areas that are crucial for big game winter survival and fawning/calving habitat.

Cultural Resources. Special consideration must be given during sale layout to protection and preservation of cultural resources as required by the Antiquities Act of 1906 and the National Historic Preservation Act of 1966.

Utilization, Slash Disposal and Site Preparation. Consideration of the following will be included in the sale planning efforts:

a. **Utilization.** Complete utilization is encouraged of all harvested trees, including marginal and noncommercial species. Each forest products sale will provide opportunity for maximum use of all timber or other vegetative resources sold and to prevent destruction of unused materials provided that such utilization is consistent with wildlife requirements.

b. **Slash Disposal and Site Preparation.** To achieve fire hazard reduction, and to provide for reforestation and other intensive forest management opportunities, full consideration must be given at time of sale planning to the desirability and method of slash disposal and site preparation. Factors to be

considered include, but are not limited to, utilization of material, removal of debris, smoke management, fire protection, watershed protection, soil compaction, nutrient loss, wildlife habitat requirements, animal damage, and reforestation requirements.

Reforestation. Each sale plan must include plans for prompt reforestation of the sale area after completion of the timber harvest operation by natural or artificial means.

Other Vegetative Resources. Preparation for sales or other vegetation resources or for small sales of minor forest products may be somewhat less detailed than preparation for a regular timber sale. As a minimum, consider the following:

- a. Opportunity for sale and potential competitive interest.
- b. Land use plans and multiple-use relationships in the area, including MFP recommendations and decisions.
- c. EA for proposed action.
- d. Access to area.
- e. Land status.
- f. Property lines.
- g. Effect of sale on other forest products.
- h. Protection reserved resources.
- i. Site protection.
- j. Erosion control.
- k. Preservation of water quality.

Plan. Prepare a layout plan after on-the-ground inspections of the sale area. Incorporate all applicable considerations listed in Section I, above, in the layout plan. The planned sale layout should be depicted on aerial photos and maps of the area, as best suited to the situation, with accompanying narrative.

Logging System. The layout plan must reflect selection of the optimum logging systems, taking into consideration the topography, size of cutting area, road locations, silvicultural prescriptions for the sale area, size of timber, location of protection areas and damageable sites, other multiple-use factors, and harvest plans for removal of timber from adjacent reserved areas.

Road and Boundary Locations. On aerial photos or maps, show the following:

- a. Location and boundary of clear-cut areas, partial cuts areas, special cutting areas and special yarding areas.
- b. Location of reserve areas or reserved trees.
- c. Location of property boundaries.
- d. Location of mainline roads, logging spur roads, and landing areas.

Supervision. Sale layout, in accordance with the layout plan, will be done by or under the supervision

of a professional forester and in consultation with specialists of other disciplinary expertise. The marking and designation of cutting areas is a complex assignment, requiring the best effort of experienced forestry personnel. Most sale layout involves completion of plans and consideration for the following items:

- a. Location and identification of corners, corner monuments and property lines.
- b. Mainline roads, spur roads, landings, and road improvement work located, surveyed, or designed and staked and locations referenced.
- c. Rights-of-way boundary involving new road construction blazed or painted and posted through timber areas.

Fire Management

1. Fire Management Plans will be completed and approved for both the Border and Wenatchee Resource Areas.

2. Unless covered by an approved fire management plan authorizing a modified suppression strategy, all wildfires on or threatening Bureau lands will be suppressed per policy.

3. Suppression will follow policy and/or fire plan guidelines, increasing in intensity where life threatening situations, developed areas, and areas of high value resources are involved.

4. All unplanned ignitions (wildfires) will have a timely post burn review and evaluation in order to define appropriate rehabilitation and/or monitoring needs.

5. All planned ignitions (prescribed fires) will have a written and approved burn plan listing specific, measurable objectives and techniques and will be conducted in accordance with Bureau fire management policy.

Recreation Sites

1. Project work undertaken within recreation sites would be designed and constructed to fit general layout and themes of site.

2. Project work undertaken near recreation sites would be designed and constructed with an adequate buffer to provide for protection of scenic values of the recreation site.

Visual Resource Management (VRM)

1. Class I—Primarily for WSAs, RNAs, ACECs, ONAs, Wilderness and Wild and Scenic Rivers. No projects will be allowed within these areas.

2. Class II—Primarily for areas of high scenic quality. Any project work within a Class II area cannot be visible to a casual visitor from any travel route.

3. Class III—Primarily for areas considered important from an aesthetic view point. Not necessarily outstanding scenery. Project work can be seen within a Class III area from travel routes. However, projects cannot be a focal point on the landscape.

4. Class IV—Primarily for general scenic landscapes throughout much of BLM. Project work within a Class IV area can be a focal point on the landscape to the casual visitor.

5. Class V—Primarily for sites requiring reclamation (landfills, timber cuts, mining operations, etc.). Project work within these areas is virtually unrestricted VRM guidelines.

Cultural Resources

Management of cultural resources emphasizes protection and preservation. To meet these objectives, the Department of Interior has issued instructions setting forth preservation and protection guidelines. In accordance with the National Historic Preservation Act of 1966, as amended, Executive Order 11593 and BLM policy, appropriate measures (such as inventory and existing data review) would be taken to identify, protect, preserve, and determine the significance of cultural properties prior to implementation of any project or plan. Prior to any activity plan or project that may adversely affect these properties, the appropriate State Historic Preservation Office (SHPO) would be consulted in the determination of effect upon the cultural property. For any site within the project area determined eligible for the National Register of Historic Places, and determined to be adversely effected by the activity plan or project, mitigation measures would be undertaken. Appropriate mitigating measures and evaluation of effect on properties are determined in consultation with the State Historic Preservation Officer and National Advisory Council on Historic Preservation. Usually project or plan redesign (location or method) would be employed where practical. Mitigation measures may include, but are not limited to, the following: 1) sites; 2) intensive documentation of the cultural resource before proceeding with project implementation; 3) adopting methods or techniques that would minimize direct and indirect disturbance to the site and its environmental setting; 4) removing and relocating historic cultural properties to another location after documentation and development of a management plan to maintain the values of the property; or 5) excavating the archaeological properties with the goal of preserving the values of the properties.

The inventory or mitigation would be directed by cultural resource specialists or through contracts with individuals or institutions meeting professional standards. Management plans would be developed for all National Register properties and others determined to need comprehensive management.

Special stipulations in contracts and leases and acknowledgement of mining notices will be included

to protect undiscovered or subsurface cultural resources not identified during inventory. In all cases, cultural resources discovered during an operation or activity on BLM land will be left intact and operations in the area suspended. Operations will not be resumed until written permission is received from the authorized officer. Cultural resources will be evaluated and protected in accordance with procedures under 36 CFR 800 and legislated requirements, including consultation with the State Historic Preservation Officer in the determinations of eligibility and effects.

Special stipulations on fuelwood (firewood cutting) permits: Standing dead trees within 100' of any historic building or structural remains (for example cabins, barns, outbuildings, historic mining structures) must be felled away from the structure or remains.

See also Timber Harvest (Cultural Resources), locatable Mineral Development Item, All Operations, 2e citing the 43 CFR 3809 regulations.

Wildlife

No action will be taken by the BLM that could jeopardize the continued existence of any federally listed threatened or endangered plant or animal species. The U.S. Fish and Wildlife Service will be consulted regarding actions that affect habitat of these species. State sensitive species will be given the same management considerations as though they were officially listed pursuant to the Endangered Species Act of 1973.

Consultation with the Washington State Department of Game will be accomplished on major construction and/or surface-disturbing activities in high-value wildlife areas.

Vegetation manipulation and revegetation projects in crucial wildlife areas would be done in irregular shape and to create a vegetation mosaic.

All areas where major vegetation manipulation or conversion occurs will be totally rested from livestock grazing for at least two growing seasons following treatment.

Wildlife escape devices will be installed and maintained in water troughs.

BLM will not do any action that would reduce minimum flow below instream flow recommended by Washington State Department of Game/or Fisheries on Class I fishable streams.

In crucial wildlife habitats, major construction and maintenance work will be scheduled to avoid or minimize disturbance to wildlife. Areas disturbed during project construction will be reseeded with a mixture of grasses, forbs, and shrubs to meet site specific needs or habitat requirements. All new fences will be built to standard Bureau wildlife specifications.

Current Livestock Authorization, Estimated Livestock Carrying Capacities, and Selective Management Categories.

Management Area	Allotment Number	Selective Management Category	Acres Public Land	Livestock Numbers	Class *	Grazing Period Begin-End	BLM AUMs Authorized Use	Estimated** Carrying Capacity AUMs
Similkameen	0701	I	1,851	123	C	4/20 - 6/10	246	128
	0702	M	200	20	C	4/15 - 5/31	40	40
						10/6 - 11/15		
	0703	C1	1,438	53	C	6/1 - 10/15	239	239
	0704	I	4,607	59	C	3/1 - 2/28	708	599
	0705	I	2,322	38	C	4/15 - 11/30	283	254
	0706	C1	488	6	C	4/15 - 12/15	46	46
	0707	I	3,742	52	C	3/1 - 2/28	624	247
	0708	C1	2,031	48	C	4/1 - 10/31	338	338
	0709	C1	1,357	40	C	6/1 - 9/30	159	159
	0710	C2	187	9	C	6/1 - 7/31	37	37
	0711	M	1,524	35	C	6/1 - 10/31	175	175
	0712	M	2,894	89	C	5/1 - 10/15	489	489
	0713	C1	288	7	C	6/1 - 10/31	33	33
	0714	C1	468	11	C	5/1 - 10/31	67	67
	0833	C1	40	1	C	3/1 - 2/28	8	8
	0838	C1	157	3	C	4/1 - 10/31	20	20
	0861	C1	460	9	C	5/1 - 10/30	55	55
	0871	C1	560	18	C	4/15 - 8/14	70	70
	0890	C1	881	18	C	5/1 - 12/31	142	142
	0894	C2	500	33	C	5/1 - 7/14	83	83
	0913	C1	100	3	H	5/1 - 7/31	9	9
	0920	C1	111	2	C,H	4/1 - 10/31	16	16
	0927	C2	320	10	C	4/16 - 9/30	53	53
	0938	C1	280	12	C	5/1 - 6/30	46	46
						10/1 - 11/30		
	0968	C2	670	13	C	5/15 - 10/15	67	67
	Total		27,476	712			4,053	3,420
Concomully	0723	C1	492	17	C	6/1 - 10/31	84	84
	0725	C2	790	26	C	5/15 - 10/14	130	130
	0726	C2	80	1	C	5/15 - 9/30	13	13
	0727	C2	716	60	C	6/1 - 7/31	120	120
	0728	C1	197	5	C	5/1 - 10/31	37	37
	0729	C2	117	3	C	5/10 - 10/15	17	17
	0731	C2	160	29	C	6/15 - 7/15	29	29
	0734	M	930	62	C	4/20 - 5/20	124	124
	0735	I	720	26	C	5/1 - 10/15	144	57
	0736	C1	80	3	C	4/1 - 5/31	16	16
						10/1 - 12/31		
	0737	I	560	16	C	4/1 - 10/31	112	112
	0738	C1	170	2	C	3/1 - 2/28	21	21
						4/1 - 5/31		
	0739	C2	197	3	C	11/1 - 12/31	33	33
	0740	C2	676	21	C	4/15 - 9/30	113	113
	0741	C1	1,040	21	C	4/1 - 10/31	148	148
	0742	C2	80	2	C	3/15 - 9/30	10	10
	0743	C2	140	3	C	3/1 - 10/31	23	23
	0853	C2	80	2	C	5/1 - 11/30	16	16
	0866	C2	40	4	C	4/1 - 5/31	7	7
	0872	C1	1,090	22	C	5/15 - 10/31	210	210
	0919	C2	40	1	C	4/15 - 10/14	6	6
	0939	C1	988	27	C	3/1 - 10/31	218	218
	0961	C2	80	5	C	6/1 - 9/30	20	20
	Total		9,463	361			1,651	1,564
Jameson Lake	0771	C1	1,564	33	C	4/1 - 9/30	195	195
	0772	C1	909	23	C	4/1 - 8/31	114	114
	0789	C2	400	7	C	4/1 - 10/30	50	50
	0971	C2	160	2	C	4/1 - 11/30	17	17
	Total		3,033	65			376	376

**Current Livestock Authorization, Estimated Livestock Carrying Capacities, and
Selective Management Categories.**

Management Area	Allotment Number	Selective Management Category	Acres Public Land	Livestock Numbers	Class *	Grazing Period Begin-End	BLM AUMs Authorized Use	Estimated Carrying Capacity AUMs
Douglas Creek								
	0774	C2	40	2	C	4/15 - 8/15	6	6
	0775	C1	4,795	120	C	5/1 - 8/31	480	480
	0776	M	400	7	C	4/15 - 12/14	57	57
	0777	M	883	16	C	4/1 - 12/15	136	136
	0778	I	5,405	90	C	5/1 - 10/1	449	451
	0780	C1	160	2	C	3/1 - 2/28	21	21
	0781	C1	1,362	65	C	4/1 - 6/30	195	195
	0782	C1	958	16	C	4/12 - 12/31	137	137
	0783	M	640	27	C	4/1 - 7/30	170	170
	0784	C2	162	6	C	4/1 - 10/31	40	40
	0785	C1	2,619	58	C	5/1 - 9/30	291	291
	0786	M	920	13	C	3/1 - 2/28	153	153
	0788	C1	1,761	34	C	3/15 - 8/14	271	271
	0909	M	160	3	C	9/15 - 12/14		
	0916	M	120	9	C	3/1 - 12/31	27	27
	0940	C2	160	3	C	4/1 - 5/31	17	17
					C	4/1 - 9/30	18	18
Total			20,745	471			2,360	2,470
Saddle Mountains								
	0797	C1	4,620	101	C	3/1 - 5/31	695	695
	0806	I	9,558	160	C	10/15-5/15	1,120	934
	0808	I	4,303	156	C	3/1 - 5/31	1,468	294
	0810	C1	3,600	96	C	12/15-2/28	387	387
Total			22,281	513			2,670	2,310
Rattlesnake Hills								
	0814	M	998	8	C	3/1 - 2/28	91	91
	0815	M	2,427	51	C	4/1 - 11/30	405	405
	0817	C1	1,240	6	C	3/1 - 2/28	66	66
	0819	C1	400	2	C	3/1 - 2/28	26	26
	0820	C1	1,943	81	C	3/1 - 6/30	324	324
	0822	C1	2,578	151	S	3/1 - 2/28	363	363
	0821	C1	2,434	33	C	5/1 - 2/28	325	325
	0823	C1	1,720	96	S	3/1 - 2/28	231	231
	0825	C1	5,560	55	C	3/1 - 2/28	655	655
	0826	C1	1,112	13	C-H	3/1 - 5/31	120	120
					H	3/1 - 2/28	40	40
	0827	C1	362	4	C	3/1 - 2/28	48	48
	0828	C1	1,303	87	C	3/15 - 5/31	217	217
	0834	M	1,680	33	C	3/1 - 2/28	400	400
Total			23,757	620			3,311	3,311
Badger Slope								
	0540	I	4,808	23	C	3/1 - 2/28	276	848
	0544	I	692	32	C	3/1 - 4/30	64	119
	0545	C1	120	2	C	3/1 - 2/28	18	18
	0546	C2	1,995	51	C	12/1 - 2/28	300	300
	0590	C2	80	2	C	10/1 - 2/28	11	11
	0672	C2	105	1	C	3/1 - 2/28	12	12
Total			7,800	111			681	1,308
Rock Creek								
	0548	C1	480	7	C	4/1 - 10/31	48	48
	0549	C2	320	5	C	4/1 - 11/30	40	40
	0550	C2	160	5	C	5/30 - 9/10	18	18
	0551	C2	80	3	C	5/15 - 8/30	9	9
	0552	C1	400	5	C	4/1 - 11/30	40	40
	0553	C1	2,508	31	C	5/1 - 12/31	251	251
	0555	C1	1,120	148	C	12/1 - 2/28	149	149
	0593	C1	480	2	C	3/1 - 2/28	48	48
Total			5,548	206			603	603

**Current Livestock Authorization, Estimated Livestock Carrying Capacities, and
Selective Management Categories.**

Management Area	Allotment Number	Selective Management Category	Acres Public Land	Livestock Numbers	Class *	Crazing Period Begin-End	BLM AUMs Authorized Use	Estimated Carrying Capacity AUMs
North Ferry								
	0516	C2	640	29	C	6/1 - 9/30	64	64
	0517	C2	1,004	37	C	6/1 - 10/15	167	167
	0518	M	1,068	39	C	5/15 - 10/30	214	214
	0522	C2	434	12	C	5/1 - 8/31	48	48
	0524	C1	1,294	27	C	5/1 - 10/31	162	162
	0525	C1	375	8	C	5/1 - 10/31	50	50
	0526	M	553	20	C	6/1 - 10/15	92	92
	0527	C2	151	5	C	6/1 - 9/30	20	20
	0528	C2	33	1	C	6/1 - 9/30	4	4
	0571	C2	228	7	C	5/1 - 9/30	33	33
	0577	C2	40	2	C	6/1 - 10/15	7	7
	0580	C2	220	5	C	4/15 - 10/31	30	30
	0583	C2	120	2	C	5/1 - 11/30	15	15
	0586	C2	46	1	C	5/1 - 10/31	8	8
	0588	C2	568	12	C	5/1 - 10/31	72	72
	0584	C2	377	14	C	6/1 - 10/15	63	63
	0608	C1	193	9	C	6/1 - 9/30	35	35
	0609	C2	349	7	C	5/1 - 10/31	43	43
	0618	C2	40	1	C	5/1 - 11/15	5	5
	0630	C2	93	1	C	3/1 - 11/30	5	5
	0631	C2	14	1	C	4/1 - 11/30	10	10
	0632	C2	160	6	C	5/1 - 8/31	23	23
	0639	C2	80	5	C	6/15 - 9/14	15	15
	0651	C2	140	19	C	6/1 - 10/31	34	34
	0666	C1	464	12	C	6/1 - 10/31	62	62
	0667	C2	80	2	C	6/1 - 10/31	10	10
	0681	C2	40	1	C	3/1 - 6/30	4	4
	0684	C2	40	2	H	5/1 - 6/15	3	3
	0686	M	80	3	C	6/1 - 9/30	10	10
	0848	M	88	2	C	4/1 - 11/30	15	15
	0860	C2	798	36	C	7/1 - 9/30	109	109
	0896	M	327	16	C	6/1 - 9/30	65	65
	0905	M	179	8	C	7/1 - 10/1	30	30
Total			10,316	352			1,527	1,527
North Stevens								
	0513	C2	1,071	24	C	5/1 - 10/31	143	143
	0516	C1	482	16	C	6/1 - 9/30	53	53
	0565	C2	282	15	C	6/15 - 9/30	5	5
	0569	C2	360	9	C	3/15 - 9/30	45	45
	0578	C2	120	4	C	6/1 - 9/30	17	17
	0595	C2	465	13	C	7/1 - 11/30	66	66
	0604	C2	184	3	C	9/1 - 10/31	31	31
	0634	C1	240	8	C	6/1 - 9/30	32	32
	0645	C2	60	1	C	3/1 - 10/31	8	8
	0656	C2	581	14	C	6/15 - 11/15	72	72
	0664	C2	40	1	C	4/15 - 5/31	5	5
						9/1 - 10/31		
	0671	C2	280	6	C	4/20 - 10/31	37	37
	0683	I	911	51	C	5/1 - 8/1	152	75
Total			5,076	165			666	589
Huckleberry Mountains								
	0502	C1	473	13	C	5/1 - 9/30	67	67
	0503	C1	480	3	C	6/1 - 10/31	13	13
	0504	C1	1,799	50	C	5/15 - 9/30	225	225
	0506	C1	499	17	C	5/15 - 10/14	83	83
	0508	C2	21	1	C	6/1 - 8/31	3	3
	0573	C2	270	13	C	6/1 9/15	45	45
	0591	C2	79	2	C	5/1 - 10/31	13	13
	0599	C2	164	2	C	5/15 - 10/14	8	8
	0614	C2	80	3	C	5/1 - 8/31	10	10
	0653	C2	239	6	C	5/1 - 10/31	34	34
Total			4,104	110			501	501
Juniper Forest								
	0534	C1	2,554	100	C	3/1 - 4/20	170	160
	0535	I	2,985	39	C	3/15 - 12/14	353	166
	0536	I	5,038	138	C	1/1 - 4/15	483	247
	0693	C3	80	1	H	5/1 - 7/1	10	10
						10/1 - 12/31		
Total	0694	C1	1,072	29	C	4/1 - 7/31	115	115
			11,729	307			1,131	698

Current Livestock Authorization, Estimated Livestock Carrying Capacities, and Selective Management Categories.

Management Area	Allotment Number	Selective Management Category	Acres Public Land	Livestock Numbers	Class *	Grazing Period Begin-End	BLM AUMs Authorized Use	Estimated Carrying Capacity AUMs
Chelan County								
Scattered Tracts								
	0747	C2	480	3	H	61 - 9/30	27	27
	0752	C2	560	6	H	4/15 - 10/15	36	36
	0755	C1	870	35	C	3/1 - 10/31	145	145
	0758	C2	700	13	C	4/16 - 11/15	88	88
	0764	M	2,386	19	C	4/10 - 9/30	110	110
	0768	C2	280	13	C	4/16 - 7/31	46	46
	0847	C2	320	4	C	4/1 - 9/30	25	25
	0850	M	795	44	C	5/1 - 11/15	132	132
	0869	C1	322	8	C	4/1 - 10/31	58	58
	0887	C2	120	4	C	5/1 - 9/30	20	20
	0888	C2	200	4	C	5/1 - 9/30	33	33
	0901	C2	312	11	C	6/1 - 9/30	44	44
	0923	C1	1,490	27	C	4/01 - 10/31	190	190
	0933	C2	40	1	H	4/1 - 10/31	8	8
	0944	C2	80	6	C	4/1 - 5/31	13	13
	0955	C2	582	9	C	4/1 - 10/31	66	66
	0963	C2	80	2	H	3/1 - 10/31	13	13
	0941	C2	80	1	H	5/1 - 1/31	11	11
	0925	C2	120	7	C	6/1 - 8/31	20	20
Total			9,817	217			1,085	1,085
Stevens County								
Scattered Tracts								
	0598	C2	80	2	C	5/1 - 9/30	10	10
	0668	C2	80	2	C	3/15 - 10/31	13	13
	0670	C2	77	2	C	9/1 - 1/31	9	9
Total			237	6			32	32
Okanogan County								
Scattered Tracts								
	0718	C1	280	4	C	3/1 - 2/28	47	47
	0719	C2	295	15	C	4/1 - 5/31	30	30
	0720	C2	320	18	C	4/1 - 5/31	53	53
						10/1 - 10/31		
	0721	I	688	11	C	4/15 - 10/31	69	91
	0755	C1	400	11	C	5/1 - 10/31	67	67
	0830	C2	40	1	C	5/1 - 9/30	7	7
	0835	C2	276	11	C	3/1 - 6/15	40	40
	0838	C2	118	3	C	4/1 - 9/30	17	17
	0842	C2	40	1	C	3/1 - 2/28	8	8
	0843	C2	30	1	C	4/15 - 9/15	5	5
	0844	C1	800	19	C	4/1 - 10/31	133	133
	0845	C2	80	3	C	4/16 - 10/15	16	16
	0846	I	977	31	C	4/1 - 5/31	140	59
						10/1 - 12/15		
	0848	C2	88	2	C	4/1 - 10/31	15	15
	0849	C2	120	7	C	7/1 - 9/30	20	20
	0852	C2	80	8	C	6/1 - 7/31	16	16
	0854	C2	557	40	C	4/20 - 6/30	93	93
	0860	C2	480	7	C	5/1 - 1/31	61	61
	0864	C2	200	10	C	4/1 - 5/15	15	15
	0867	C2	153	5	C	5/1 - 10/31	30	30
	0870	C2	80	3	C	5/1 - 10/31	16	16
	0885	C2	200	11	C	5/1 - 7/31	33	33
	0886	C2	120	7	C	9/1 - 11/30	20	20
	0896	C2	327	16	C	6/1 - 9/30	65	65
	0899	C2	244	5	C	3/1 - 2/28	55	55
	0902	C2	362	22	C	4/15 - 6/14	67	67
						10/1 - 10/31		
	0904	C2	382	18	C	9/1 - 11/31	54	54
	0905	C2	179	7	C	6/1 - 10/1	30	30
	0906	C2	120	3	C	5/1 - 11/1	20	20
	0910	C2	60	2	C	5/10 - 9/20	8	8
	0914	C2	172	6	C	5/15 - 9/30	25	25
	0915	C2	40	1	C	4/1 - 11/30	6	6
	0921	C2	370	19	C	5/1 - 7/31	56	56
	0937	C2	160	17	C	5/1 - 6/15	26	26
	0943	C2	200	9	H	5/1 - 6/30	28	28
						10/1 - 10/31		

Current Livestock Authorization, Estimated Livestock Carrying Capacities, and Selective Management Categories.

Management Area	Allotment Number	Selective Management Category	Acres Public Land	Livestock Numbers	Class *	Grazing Period Begin-End	BLM AUMs Authorized Use	Estimated Carrying Capacity AUMs
Okanogan County								
Scattered Tracts (Cont.)								
	0946	C2	40	4	C	5/1 - 6/30	8	8
	0948	C2	40	2	C	6/1 - 8/31	6	6
	0949	C2	146	5	C	5/1 - 10/31	29	29
	0951	C2	31	1	C	5/1 - 9/30	5	5
	0952	C2	80	2	C	3/1 - 2/28	20	20
	0953	C2	73	1	C	5/1 - 2/28	12	12
	0957	C2	100	3	C	4/1 - 5/30	17	17
	0969	C2	40	1	C	3/1 - 8/31	6	6
	0970	C2	41	2	C	5/1 - 5/31	7	7
						9/1 - 10/31		
Total			9,629	375			1,533	1,475
Ferry County								
Scattered Tracts								
	0610	C2	84	1	C	5/1 - 11/15	8	8
Colockum Cooperative Management Tracts								
	0793	M	1,935	38	C	4/1 - 7/31	152	152
Swakane Cooperative Management Tracts								
	0923	M	1,480	24	C	4/1 - 11/1	190	190
Benton County								
Scattered Tracts								
	0575	C2	152	4	C	10/15 - 4/15	23	23
	0585	C2	640	4	C	12/1 - 5/31	43	43
	0607	C2	160	4	C	11/1 - 5/31	25	25
	0627	C2	34	1	C	3/1 - 2/28	3	3
	0638	C2	160	5	C	3/1 - 2/28	20	20
	0669	C2	80	1	C	3/1 - 2/28	10	10
	0688	C2	400	11	C	2/1 - 6/15	50	50
Total			1,626	30			174	174
Yakima River Cooperative Management Area								
	0803	M	241	4	C	11/1 - 5/31	27	27
	0804	M	1,030	19	C	4/1 - 11/30	148	148
	0805	M	171	9	C	5/1 - 6/30	17	17
	0823	M	80	5	S	3/1 - 2/28	11	11
Total			1,522	37			203	203
Franklin County								
Scattered Tracts								
	0581	C2	31	1	C	3/1 - 6/30	7	7
	0587	C2	35	1	C	3/1 - 8/31	6	6
	0597	C2	80	5	C	11/1 - 4/30	16	16
	0606	C2	644	13	C	10/15 - 5/15	90	90
	0644	C2	440	5	C	3/1 - 2/28	63	63
	0646	C2	120	9	C	9/1 - 11/30	27	85
	0654	C2	160	2	C	3/1 - 2/28	26	26
	0662	C2	254	12	C	4/15 - 11/30	88	88
	0674	C2	120	7	C	3/1 - 7/1	27	27
Total			1,884	55			350	408
Douglas County								
Scattered Tracts								
	0744	C2	80	2	C	4/1 - 10/31	11	11
	0745	C2	960	20	C	4/1 - 10/31	137	137
	0746	C1	960	20	C	4/1 - 10/31	137	137
	0749	C2	775	17	C	6/1 - 9/30	86	86
	0750	C2	80	2	C	4/1 - 11/30	16	16
	0754	C2	265	8	C	6/1 - 9/30	33	33
	0756	C2	423	14	C	5/1 - 10/31	85	85
	0757	C2	198	5	C	4/15 - 11/15	33	33
	0759	C2	136	3	H	5/1 - 11/15	20	20
	0766	C1	2,414	49	C	4/1 - 10/31	346	346
	0767	C2	360	7	C	4/1 - 10/31	51	51
	0829	C1	200	5	C	5/1 - 9/30	25	25
	0831	C1	750	54	C	4/5 - 5/10	107	107
						12/1 - 12/31		
	0841	C2	239	6	C	4/1 - 9/30	34	34
	0856	C2	66	1	C	6/1 - 10/31	5	5
	0862	C2	161	5	C	6/1 - 9/30	23	23
	0868	C1	319	10	C	4/1 - 8/31	49	49
	0879	C2	240	11	C	5/16 - 8/20	32	32

Current Livestock Authorization, Estimated Livestock Carrying Capacities, and Selective Management Categories.

Management Area	Allotment Number	Selective Management Category	Acres Public Land	Livestock Numbers	Class *	Grazing Period Begin-End	BLM AUMs Authorized Use	Estimated Carrying Capacity AUMs
Douglas County								
Scattered Tracts (Cont.)								
	0883	C2	120	13	C	9/25 - 11/30	20	20
	0891	C2	160	5	C	4/16 - 9/30	26	26
	0900	C2	68	1	C	3/13 - 11/30	10	10
	0926	C2	283	18	C	4/15 - 6/30	47	47
	0931	C2	40	1	C	3/1 - 9/30	6	6
	0932	C2	120	10	C	3/1 - 5/1	20	20
	0935	C2	200	9	C	4/1 - 6/30	28	28
	0936	C2	40	1	C	4/16 - 10/31	6	6
	0942	C2	80	1	C	3/16 - 11/15	11	11
	0950	C2	480	11	C	6/1 - 8/15	28	28
	0954	C2	200	7	C	4/15 - 10/15	40	40
	0958	C2	360	6	C	3/1 - 10/31	51	51
	0962	C2	80	1	C	3/1 - 1/31	11	11
	0964	C2	360	30	C	4/1 - 5/31	60	60
	0965	H	1,083	26	C	4/1 - 5/31	155	155
	0967	C2	40	1	C	5/1 - 10/31	8	8
	0972	C2	79	1	C	4/1 - 10/31	10	10
Total			12,419	381			1,767	1,767
Asotin County								
Scattered Tracts								
	0570	C2	80	2	C	11/1 - 4/30	11	11
	0574	C2	120	9	C	3/16 - 5/31	48	48
Total			200	11		9/1 - 11/30	39	39
Adams County								
Scattered Tracts								
	0640	C2	160	4	C	11/1 - 5/31	29	29
	0647	C2	80	2	C	4/1 - 9/30	10	10
Total			240	6			39	39
Klickitat County								
Scattered Tracts								
	0555	C2	2,200	17	C	4/1 - 12/30	149	149
	0558	C2	40	2	C	4/1 - 5/31	6	6
	0559	C2	80	8	C	4/1 - 5/31	16	16
	0561	C2	40	2	C	4/1 - 5/31	8	8
	0572	C2	580	11	C	4/1 - 9/30	64	64
	0584	C2	80	2	C	3/1 - 4/30	11	11
						11/15 - 2/28		
	0593	C2	180	2	C	3/1 - 2/28	22	22
	0601	C2	40	2	C	8/1 - 10/31	7	7
	0615	C2	160	2	C	3/1 - 2/28	21	21
	0616	C2	440	8	C	4/1 - 11/30	63	63
	0617	C2	80	3	C	6/1 - 9/30	13	13
	0619	C2	184	3	C	4/15 - 10/14	15	15
	0620	C2	240	15	C	4/1 - 5/31	30	30
	0626	C2	79	2	C	4/1 - 11/30	13	13
	0629	C2	80	2	C	4/15 - 6/14	11	11
	0637	C2	1,081	29	C	3/1 - 3/31	144	144
	0638	C2	480	5	C	3/1 - 2/28	60	60
	0641	C2	240	4	C	12/1 - 3/31	30	30
						6/1 - 9/30		
	0657	C2	37	2	C	2/1 - 5/31	7	7
	0661	C2	200	5	C	4/1 - 10/31	29	29
	0665	C2	440	6	C	3/1 - 2/28	68	68
	0673	C2	160	3	C	4/1 - 12/31	23	23
	0675	C2	80	3	C	6/1 - 8/31	10	10
	0682	C2	800	10	C	3/1 - 2/28	123	123
	0690	C2	160	7	C	4/1 - 6/15	18	18
Total			8,181	135			961	961
Whitman County								
Scattered Tracts								
	0576	C2	50	4	C	5/1 - 6/30	7	7
	0600	C2	38	2	C	10/1 - 2/28	8	8
	0622	C2	450	8	C	4/15 - 11/30	60	60
Total			538	14			75	75

Current Livestock Authorization, Estimated Livestock Carrying Capacities, and Selective Management Categories.

Management Area	Allotment Number	Selective Management Category	Acres Public Land	Livestock Numbers	Class *	Grazing Period Begin-End	HUM AUMs Authorized Use	Estimated Carrying Capacity AUMs
Lincoln County								
Scattered Tracts								
	0566	C2	120	1	C	3/1 - 2/28	15	15
	0567	C2	80	2	C	4/1 - 9/30	13	13
	0568	C2	44	1	C	3/15 - 11/14	9	9
	0596	C1	320	10	C	7/1 - 10/31	40	40
	0602	C2	163	3	C	3/1 - 10/31	22	22
	0603	C2	80	4	C	4/1 - 6/30	11	11
	0611	C2	277	6	C	4/1 - 11/30	50	50
	0621	C2	240	10	C	9/1 - 12/30	40	40
	0622	C2	358	4	C	3/1 - 2/28	47	47
	0623	C2	80	3	C	4/1 - 9/30	16	16
	0624	C2	80	2	C	4/1 - 10/31	13	13
	0628	C2	80	1	C	3/1 - 10/31	8	8
	0635	C1	400	15	C	5/1 - 7/15	66	66
						10/1 - 11/30		
	0649	C2	80	4	C	6/15 - 8/30	11	80
	0650	C2	80	2	C	4/1 - 11/30	13	80
	0655	C2	680	12	C	5/1 - 11/30	85	680
	0658	C2	80	3	C	4/15 - 8/31	13	80
	0659	C2	480	33	C	5/20 - 7/4	50	480
	0660	C2	478	13	C	6/1 - 10/31	64	478
	0677	C2	80	1	C	4/1 - 10/31	8	80
	0678	C2	359	21	C	5/20 - 7/31	48	359
	0679	C2	476	45	C	4/15 - 5/31	68	476
	0680	C2	80	1	C	4/1 - 9/30	8	80
	0687	C2	160	4	C	4/1 - 10/31	27	160
	0689	C2	80	2	C	5/1 - 11/15	13	80
Total			5,435	141			758	5,435
Walla Walla County								
Scattered Tracts								
	0582	C2	40	1	C	5/28 - 11/27	6	40
Kittitas County								
Scattered Tracts								
	0794	C1	180	9	C	12/1 - 2/28	26	180
	0797	C1	5,095	99	C	11/1 - 5/31	695	5,095
	0798	C1	1,217		C	4/1 - 6/30	174	1,217
						11/1 - 12/31		
	0799	C1	2,262	66	C	4/1 - 6/30	329	2,262
						11/1 - 12/31		
	0802	C2	320	26	C	4/16 - 6/15	53	320
	0804	M	290	348	C	4/1 - 11/30	42	290
	0805	M	34	2	C	5/1 - 6/30	3	34
	0823	C2	233	13	S	3/1 - 2/28	30	233
	0855	C2	80	4	C	5/1 - 7/31	12	80
	0875	C2	40	5	C	5/15 - 6/14	5	40
	0877	C2	40	2	C	3/1 - 8/31	8	40
	0892	C2	81	8	C	4/1 - 5/31	16	81
	0912	C2	160	6	C	4/1 - 5/31	23	160
						10/1 - 11/30		
	0960	C2	200	33	C	4/1 - 4/30	33	200
Total			10,232	621			1,449	10,232
Yakima County								
Scattered Tracts								
	0812	C2	80	2	C	4/1 - 8/31	10	10
	0857	C2	564	40	C	4/1 - 5/31	80	80
	0880	C2	80	13	C	5/1 - 5/31	13	13
Total			724	55			103	103
Garfield County								
Scattered Tracts								
	0633	C2	39	1	C	10/1 - 2/28	6	6
Klickitat Cooperative Management Area								
	0559	C2	2,233	21	C	4/1 - 5/31	42	42

Current Livestock Authorization, Estimated Livestock Carrying Capacities, and Selective Management Categories.

Management Area	Allotment Number	Selective Management Category	Acres Public Land	Livestock Numbers	Class *	Crazing Period Begin-End	BLM AUMs Authorized Use	Estimated Carrying Capacity AUMs
Grant County								
Scattered Tracts								
	0837	C2	960	43	C	8/16 - 11/15	128	128
	0839	C2	560	11	C	4/1 - 10/31	80	80
	0865	C2	140	4	C	10/15 - 2/28	20	20
	0876	C2	160	2	C	3/1 - 2/28	27	27
	0881	C2	200	1	C	3/1 - 2/28	15	15
	0882	C1	446	32	C	4/1 - 4/30	64	64
	0893	M	362	362	C	5/1 - 10/31	52	52
	0897	C2	320	5	C	3/1 - 2/28	54	54
						11/1 - 11/30		
	0898	M	401	8	C	5/1 - 11/30	57	57
	0903	C1	160	3	C	3/1 - 2/28	32	32
	0908	C1	340	5	C	3/1 - 2/28	57	57
	0917	C2	682	10	C	4/1 - 10/31	68	68
	0918	C2	80	2	C	5/1 - 9/30	13	13
	0924	C2	480	9	C	9/1 - 5/31	68	68
	0928	C2	400	5	C	3/1 - 11/30	44	44
	0929	C2	240	2	C	3/1 - 10/31	16	16
	0934	C2	160	4	C	5/1 - 10/31	23	23
	0956	C2	120	4	C	4/1 - 8/30	20	20
	0966	M	1,357	22	C	4/1 - 11/30	179	179
	0974	C2	42	1	C	4/1 - 8/31	5	5
Total			7,610	535			1,022	1,022
Quincy/Crab Creek								
Cooperative Management Area								
	0836	M	673	8	C	3/15 - 11/30	72	72
Yakima Winter Feed								
Cooperative Management Area								
	0813	C2	40	5	C	4/1 - 5/31	10	10
Entiat Cooperative								
Management Area								
	0764	M	2,386	19	C	4/10 - 9/30	110	110
Chelan Butte/Gallagher								
Flats Cooperative Management Area								
	0752	M	40	1	H	3/1 - 2/28	7	7
	0760	M	2,302	47	C	4/16 - 11/15	330	330
			2,342	48			337	337
Grand Total			232,874	6,798			30,073	29,156

* C = Cattle; H = Horses; S = Sheep

** These estimates are for analysis purposes only. Future changes in authorized use would only be implemented after monitoring.

Appendix E

Fire Suppression and Management

	Acreage Involved					Fire Occurrence ²			Remarks	
	Total Planning Unit ¹	BLM Suppression Responsibility ³	BLM Protected By USFS	BLM Protected By SDNR	BLM Inside Co. FPDs	BLM Outside Co. FPDs	Reported Fires on BLM Lands 1974-1983	BLM Acres Burned	Total Acres Burned	Fire Management Plan Needed for All Units
Management Unit										
Similkameen	200,960	30,129	1,629	28,500	766	29,363	1	1	1	Part Wilderness Study Area-Modified Suppression. Prescribed fire use under consideration.
Conconully	141,440	9,739	1,278	8,461	5,209	4,530	3	450	5,100	Good suppression coverage by USFS and SDNR.
Jameson Lake	35,200	3,784	0	0	551	3,233	0	0	0	Fire history unknown.
Douglas Creek	183,680	16,629	0	0	2,924	13,705	4	53	53	High man-caused risk area.
Saddle Mountains	147,200	34,337	0	0	33,387	950	8	15,580	49,485	Large recurring fires.
Badger Slope	48,630	7,721	0	0	7,721	0	1	4,000	5,440	Large recurring fires.
Rattlesnake Hills	193,920	24,726	0	0	10,923	13,803	8	10,440	34,890	Large recurring fires.
Rock Creek	36,560	6,528	0	5,990	960	5,468	0	0	0	Fire history unknown.
North Ferry	294,400	12,947	1,283	11,664	11,365	86	5	46	296	Good suppression coverage by USFS and SDNR.
North Stevens	341,760	16,206	936	15,270	0	16,206	1	5	5	Good suppression coverage by USFS and SDNR.
Huckleberry Mountains	168,960	11,270	25	11,245	2,779	8,491	3	42	2,242	Good suppression coverage by USFS and SDNR.
Juniper Forest	111,360	13,311	0	0	2,323	10,988	8	8,130	14,000	Intensive suppression area due to public concern. Modified suppression area due to roadless enclosure.
Scattered Tracts	16,640,298	127,587	25,648	52,726	89,855	49,329	38	26,957	96,763	Fire history partly unknown.
Totals	18,578,808	314,914	30,799	133,856	168,762	156,152	80	65,704	208,274	

¹ Approximate acreage.

² Complete fire history not available.

³ Acres protected may differ from acres managed; for instance, Bureau of Reclamation lands protected by BLM.

List of Preparers

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Glossary

Abatement Suppression or termination; an amount deducted or subtracted, as from the usual price, the full tax, and so on; a reduction of a tax assessment.

Activity Plan A site specific plan for the management of one or more resources (for instance a CRMP, AMP). This is the most detailed level of BLM planning.

Actual Use The true amount of grazing AUMs based on the numbers of livestock and grazing dates submitted by the livestock operator and confirmed by periodic field checks by the BLM.

Adjustments Changes in animal numbers, periods of use, kinds of classes of animals or management practices as warranted by specific conditions.

Allotment An area of land where one or more livestock operators graze their livestock. Allotments generally consist of BLM lands but may also include other Federally managed, State owned, and private lands. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

Allotment Management Plans (AMP) An intensive livestock grazing management plan dealing with a specific unit of rangeland, based on multiple use resource management objectives. The AMP considers livestock grazing in relation to the renewable resources--watershed, vegetation, and wildlife. An AMP establishes the season of use, the number of livestock to be permitted on the range, and the range improvements needed.

Alluvium Well sorted soil and rock debris deposited by water.

Anadromous Fish which migrate from the ocean to breed in fresh water. Their offspring return to the ocean.

Animal Unit Month (AUM) The amount of forage consumed by one mature cow and calf under six months, for one month. The amount of forage consumed by one horse, or five sheep, or five deer, or six bighorn for one month is considered equal to one cow AUM; also a unit of measurement of grazing privilege that represents the privilege of grazing one animal for a period of one month.

Archaeological Site Geographic locale containing structures, artifacts, material remains, and/or other evidence of past human activity.

Aspect The direction a slope faces.

Best Forest General forest management practices which are Management Practices consistent for all timber harvest and treatment activities.

Big Game Animals Limited to elk, mule deer, bear, mountain goats, and bighorn sheep in Spokane District in this document.

Board Feet A unit of solid wood, one foot square and one inch thick.

Broadcast Burning Allowing a controlled fire to burn over a designated area within well defined boundaries for a reduction of fuel hazard or as a silvicultural treatment or both.

Browse To browse is to graze a plant; also, browse (noun) is the tender shoots, twigs, and leaves of shrubs often used as food by cattle, deer, elk, and other animals.

Buffer Strip A protective area adjacent to an area of concern requiring special attention or protection. In contrast to riparian zones which are ecological units, buffer strips can be designed to meet varying management concerns.

Bureau Planning System A process used in the BLM to establish land use allocations, constraints, and objectives for various categories of public land use.

Cadastral Survey A survey that creates, marks, defines, retraces, or reestablishes the boundaries and subdivisions of public land.

Caln A heap of stones set up as a landmark, monument, tombstone, and so forth.

Carrying Capacity The maximum stocking rate possible without damaging vegetation or related resources.

Catchment A structure built to collect and retain water.

Clearcutting A method of timber harvesting in which all trees, merchantable or unmerchantable, are cut from an area.

Climax Plant Community The vegetative community that emerges after a series of successive vegetational stages and perpetuates itself indefinitely unless disturbed by outside forces.

Commercial Forestlands Forestland capable of producing merchantable timber at rates of at least 20 cubic feet per acre per year and is currently or prospectively accessible and not withdrawn from such use.

Commercial Tree Species Tree species whose yields are reflected in the allowable cut: pines, firs, spruce, Douglas fir, cedar, and larch.

Coordinated Resource Management Plan (CRMP) A specific management plan for a unit of land developed by all landowners (Federal, State, private, and so on) and affected interests for management of all resources and land uses (grazing, timber, wildlife habitat, and so on) within the land unit.

Critical Growth Period A specified period of time in which plants need to develop sufficient carbohydrate reserves and produce seed, for instance approximately the months of May and June for bluebunch wheatgrass.

Critical Habitat Any habitat, which, if lost, would appreciably decrease the likelihood of the survival and recovery of a threatened or endangered species or a distinct segment of its population. Critical habitat may represent any portion of the present habitat of a listed species and may include additional areas for reasonable population expansion. Critical habitat must be officially designated as such by the Fish and Wildlife Service or the National Marine Fisheries Service.

Crucial Wildlife Parts of the habitat necessary to sustain a wildlife habitat population at critical periods of its life cycle. This is often a limiting factor on the population, such as breeding habitat, winter habitat, and so forth.

Cultural Site Any location that includes prehistoric and/or historic evidence of human use or that has important sociocultural value.

Custodial (C) Category Allotments These are grazing allotments that are unfenced, small tracts which are intermingled with much larger acreages of non-BLM rangelands, thus limiting BLM's management opportunities. The custodial category was further divided into C1 and C2 allotments. The C1 designation will allow reclassification to an I category allotment when BLM obtains increased cooperation with adjacent landowners or improved manageability through land acquisition for improved management and BLM investment in range improvements. The C2 designation would result in the allotment remaining custodial management.

Deferment The withholding of livestock grazing on an area until a certain stage of plant growth is reached.

Deferred Grazing Discontinuance of livestock grazing on an area for a specified period of time during the growing season to promote plant reproduction, establishment of new plants, or restoration of the vigor by old plants.

Deferred Rotation Grazing Discontinuance of livestock grazing on various parts of a range in succeeding years, allowing each part to rest successively during the growing season. This permits seed production, establishment of new seedlings, or restoration of plant vigor. Two, but more commonly three or more, separate pastures are required.

Direct Sale A sale at fair market value to a designated purchaser without competitive bidding.

Distribution The uniformity of livestock grazing over a range area. Distribution is affected by the availability of water, topography, and type and palatability of vegetation as well as other factors.

Easements A right held by one person to make use of the land of another for a limited purpose, as right of passage.

Ecological Range Condition Four classes used to express the degree to which the Condition Classes composition of the present plant community reflects that of climax. They are as follows:

Successional Stage	Percentage of Present Plant Community that is Climax for the Range Site
Climax	76-100
Late Seral	51-75
Middle Seral	26-50
Early Seral	0-25

Ecosystem An ecological unit consisting of both living and nonliving components which interact to produce a natural, stable system.

Endangered Species A plant or animal species whose prospects for survival and reproduction are in immediate jeopardy, as designated by the Secretary of the Interior, and as is further defined by the Endangered Species Act of 1973, as amended.

Environmental Impact The positive or negative effect of any action upon a given area or resource.

Environmental Impact Statement (EIS) A formal document to be filed with the Environmental Protection Agency that considers significant environmental impacts expected from implementation of a major Federal action.

Fauna All the animals in a given area.

Federal Land Policy and Management Act of 1976 (FLPMA) Public Law 94-579. October 21, 1976, often referred to as the BLM's "Organic Act," which provides the majority of the BLM's legislated authority, direction, policy, and basic management guidance.

Flora All the plants in a given area.

Forage All browse and herbaceous foods that are available to grazing animals including wildlife and domestic livestock.

Forbs A broad-leaved herb that is not a grass, sedge, or rush.

Forest Management All commercial forestland that is part of the timber Lands production base for allowable cut calculation.

Geothermal Of or pertaining to the internal heat of the earth.

Glacial Outwash The material, chiefly sand or gravel, washed from a glacier by the action of meltwater.

Glacial Till Glacial drift consisting of an unsorted mixture of clay, sand, gravel, and boulders; a stiff clay.

Grazing System The manipulation of livestock grazing to accomplish a desired result. (See Appendix D for description of the various grazing systems.)

Ground Cover Vegetation, mulch, litter, rock, and so forth.

Improve (I) Category Allotment These are grazing allotments that have a potential for resource improvement where BLM controls enough land to implement changes.

Lek A site to which birds regularly resort for purposes of sexual display and courtship.

Lieu Public lands that a patentee has a right to locate and select in place of lands within the limits of a previous grant which are occupied by persons given special protection by the law.

Lithic A stone or rock that may be either abraded into the proper form for use as a tool or shaped by knocking pieces (flakes) off. A cluster of flakes is called a "lithic scatter."

Lithic Scatter A prehistoric site characterized by a scatter of stone tools and flakes that may indicate a number of functions.

Loam A rich, friable (crumbly) soil containing a relatively equal mixture of sand and silt and a somewhat smaller proportion of clay.

Locatable Minerals Minerals or materials subject to disposal and development through the Mining Law of 1872 (as amended). Generally includes metallic minerals such as gold and silver and other materials not subject to lease or sale (some bentonites, limestone, talc, some zeolites, and so on).

Lopping Cutting off one or more branches of a tree whether it is standing, felled, or fallen.

Lopping and Scattering Lopping the slash created by logging operations and spreading it more or less evenly over the ground without burning.

Maintain (M) Category Allotment These are grazing allotments where satisfactory management has already been achieved through Conservation Plans, Coordinated Resource Management Plans, or Cooperative Agreements with adjoining landowners.

Management Framework Plan (MFP) Land use plan that established coordinated land use allocations for all resource and support activities for a specific land area within a BLM District. It also establishes objectives and constraints for each resource and support activity and provides data for consideration in program planning. (This process has been replaced by the Resource Management Planning process.)

Management Situation Analysis (MSA) A comprehensive display of physical resource data and an analysis of the current use, production, condition, and trend of the resources and the potentials and opportunities within a planning unit, including a profile of ecological values.

Mineral Entry The location of mining claims by an individual to protect his right to a valuable mineral.

Mitigation Measures (a) Avoiding the impact altogether by not taking a certain action or parts of an action. (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation. (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment. (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action. (e) Compensating for the impact by replacing or providing substitute resources or environments.

Multiple Use Balanced management of the various

surface and subsurface resources with permanent impairment of the productivity of the lands that will best meet present and future needs.

National Register of Historic Places The official list, established by the Preservation Act of 1966, of the Nation's cultural resources worthy of preservation. The Register lists archeological, historic, and architectural properties (such as districts, sites, buildings, structures, and objects) nominated for their local, State, or National significances by State and/or Federal agencies and approved by the National Register staff. The Register is maintained by the National Park Service.

Noncommercial Forestland Land which is not capable of yielding at least 20 cubic feet of wood per acre per year of commercial species of land which is capable of producing only noncommercial tree species.

Nonoperable Forestlands unsuitable for any type of timber harvest Forestland activity due to their 1) physical features; for example, extremely rocky, boulder fields, rim rocks, rock outcrops, and unsafe for logging operations and/or 2) forestlands on which logging activity will result in the loss of the site's potential for producing commercial tree species; for example, loss of soil through erosion, slope failure, and/or the inability to reforest the site within acceptable time limits (usually five to fifteen years) even with special reforestation techniques.

Off-Road Vehicle (ORV) Any motorized track or wheeled vehicle designed for cross-country travel over any type of natural terrain.

Old Growth Stand A stand of trees that is past full maturity and showing sign of decadence, usually 200 year age class or older (large trees, snags and down logs, multilayered canopy, many species).

Operations Inventory An intensive forest inventory which provides managers with information showing the location, acreage, silvicultural needs, and mortality-salvage or thinning needs within each section of public land.

Outstanding Natural Area (ONA) An area of unusual natural characteristics where management of recreation activities is necessary to preserve those characteristics.

Paleontology A science dealing with the life of past geological periods as known from fossil remains.

Permeability (soil) The quality of a soil horizon that enables water or air to move through it; may be limited by the presence of one nearly impermeable horizon even though the others are permeable.

Placer Mining A method of mining in which the surface material is washed for gold or other valuable minerals. When water under pressure is employed to break down the gravel, the term hydraulic mining is generally used.

Planning Unit A geographic area within a BLM District used for assembling resource inventory data.

Plant Community An association of plants of various species found growing together in different areas with similar site characteristics.

Plant Succession The process of vegetative development whereby an area becomes successively occupied by different plant communities of higher ecological orders.

Prescribed Fire A planned burning of live or dead vegetation under favorable conditions which would achieve desired results.

Public Lands Any land and interest in land (such as mineral estate) owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management. May include public domain or acquired lands in any combination.

Raptors Bird species which have adapted to seize prey, such as eagles and hawks.

Recreation and Public Purposes Act (R & PP Act) This act authorized the Secretary of the Interior to lease or convey public lands for recreational and public purposes under specified conditions to states or their political subdivisions and to nonprofit corporations and associations.

Research Natural Areas "A naturally occurring physical or biological unit (RNA) where natural conditions are maintained insofar as possible." Further, the natural features are preserved for research and educational purposes. The features to be preserved may be important or unique ecosystems, habitats, organisms and may be terrestrial, freshwater, or marine.

Right-of-Way A permit or an easement which authorizes the use of public lands for certain specified purposes, commonly for pipelines, roads, telephone lines, electric lines, reservoirs, and so on; also, the lands covered by such an easement or permit.

Riparian Habitat Those terrestrial areas where the vegetation complex (Area or Zone) and microclimate conditions are products of the combined presence and influence of perennial and/or intermittent water, associated high water tables and soils which exhibit some wetness characteristics.

Riprap A quantity of broken stone for foundations, revetments of embankments, and so on; a foundation or wall of stones thrown together irregularly.

Runoff That part of precipitation, as well as any other flow contributions, which appears in surface streams, either perennial or intermittent.

Sailable Minerals High volume, low value mineral resources including common varieties of rock, clay, decorative stone, sand, and gravel.

Sensitive Species Species not yet officially listed but which are undergoing a status review or are proposed for listing according to a Federal Register Notice published by the Secretary of the Interior or Secretary of Commerce or according to comparable States' documents published by State officials. (Reference Instruction Memorandum WO 80-722.)

Seral Stage The series of relatively transitory communities, including plants and animals which develop during ecological succession, beginning after the Pioneer State (such as beginning with bare ground) to the Climax Stage.

Shrub A low woody plant, usually with several stems, that may provide food and/or cover for animals.

Slash The branches, bark, tops, cull logs, and broken or uprooted trees left on the ground after logging has been completed.

Soil Loss Tolerance The maximum amount of soil loss as expressed in tons/acre/year that can be tolerated and still permit a high level of productivity to be sustained indefinitely.

State Historic Preservation Officer (SHPO) The official within each State, authorized by the State at the request of the Secretary of the Interior, to act as a liaison for purposes of implementing the National Historic Preservation Act of 1966.

State Lieu See Lieu in Glossary.

Stocking Rate (Livestock) An expression of the number of animals and the grazing period allotted to a specific area. It is usually expressed as a ratio, such as acres/AUM.

Succession The orderly process of plant community change. The process by which one plant or animal community will succeed another over time given the same climatic conditions.

Sustainable Annual Harvest The yield that a forest can produce continuously from a given level of management.

Threatened Species A plant or animal species that the Secretary of the Interior has determined to be likely to become endangered within the foreseeable future throughout all or most of its range.

Timber Production See Table 4-2. **Base (Low Intensity)**

Timber Production Base (Full) Commercial forestland used to produce timber on a Base (Full) sustainable basis.

Timber Production Capability Classification (TPCC) The process of partitioning forestland into major classes indicating relative suitability to produce timber on a sustained yield basis.

Visitor Day Twelve hours of recreational use by one person.

Visual Resource Management (VRM) The planning, design, and implementation of management objectives to provide acceptable levels of visual impacts.

Visual Resource Management Classes The degree of acceptable visual change within a characteristic landscape. A class is based upon the physical and sociological characteristics of any given homogeneous area and serves as a management objective.

Class I areas (preservation) provide for natural ecological changes only. This class includes primitive areas, some natural areas, some wild and scenic rivers, and other similar sites where

landscape modification activities should be restricted.

Class II (retention of the landscape character) includes areas where changes in any of the basic elements (form, line, color, or texture) caused by management activity should not be evident in the characteristic landscape.

Class III (partial retention of the landscape character) includes areas where changes in the basic elements (form, line, color, or texture) caused by management activity may be evident in the characteristic landscape. However, the changes should remain subordinate to the visual strength of the existing character.

Class IV (modification of the landscape character) includes areas where changes may subordinate the original composition and character; however, they should reflect what could be a natural occurrence within the characteristic landscape.

Class V (rehabilitation or enhancement of the landscape character) includes areas where change is needed. This class applies to areas where the landscape character has been so disturbed that rehabilitation is needed. This class would apply to areas where the quality class has been reduced because of unacceptable intrusions. It should be considered an interim short-term classification until one of the other classes can be reached through rehabilitation or enhancement.

Water Quality The chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

Watershed All lands which are enclosed by a continuous hydrologic drainage divide and lie upslope from a specified point on a stream.

Wetlands or Wetland Habitat Permanently wet or intermittently flooded areas where the water table (fresh, saline, or brackish) is at, near, or above the soil surface for extended intervals, where hydric (wet) soil conditions are normally exhibited, and where depths generally do not exceed two meters. Vegetation generally consists of emergent water loving forms (hydrophytes) which require at least a periodically saturated soil condition for growth and reproduction. In certain instances, vegetation may be completely lacking.

Wilderness Study Area (WSA) An area determined to have wilderness characteristics. Study areas will be subject to interdisciplinary analysis and public comment to determine wilderness suitability. Suitable areas will be recommended to the President and Congress for wilderness designation.

